KEN KESEY • PAUL EHRLICH • ALLEN GINSBERG

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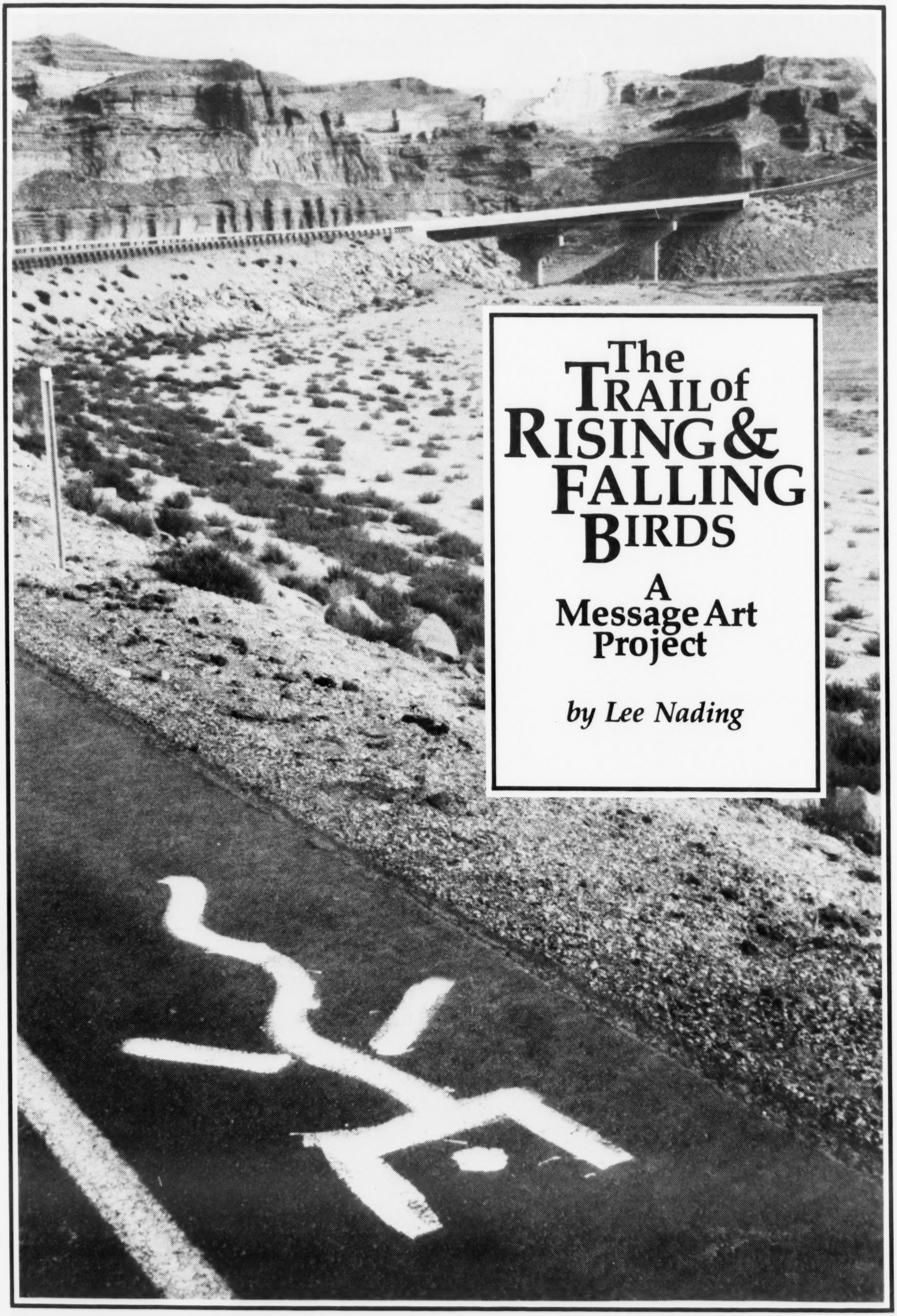
CoEVOLUTION Quarterly

Summer 1984

CRIME AND CAPITALISM IN CHINA

A Photo Essay by Orville Schell

The rise of a new class of petty hoodlums *(top)*, and public parades of sentenced criminals *(bottom)*, mark China's revival of private enterprise. For more glimpses of a changing China, see page 30.



The Trail of Rising & Falling Birds

A Message Art Project

by Lee Nading

Since May 1983, artist Lee Nading has been driving around the U.S., engaged in a roadside art project. In a switch on the usual process of bringing external subjects into the world of paintings and galleries, Nading is taking his paintings out to his subjects — in this case environmental and cultural sites where nature and technology are in contention.

As Nading describes it: "I have a master map of the U.S. with potential sites marked, and I drive between them on a schedule that has me arrive at each site after dark. I keep a gallon can of white interior latex paint on the front seat, and after making sure the coast is clear, I jump out with my three-inch brush and do the painting posthaste. I have to bypass some sites due to rain or over-vigilant cops.

"I paint *rising birds* at sites where nature or human sanity has reasserted itself, such as fallen bridges, earthquakes, soft energy projects, and holistic institutions. *Falling birds* are painted where threats occur, at military installations, toxic spills, assassination sites, nuclear plants, etc. The bird is rising if it is going away from you as you approach it in the driving lane, and falling if it is coming toward you. I use birds because they are symbolic of the human spirit and our bond with nature."

Nading has painted over 60 birds so far, at sites in 17 states, and has a goal of 200 sites by the end of 1984.

What distinguishes this project from a private exercise in graffiti? How can it have an effect? Nading theorizes that social movements evolve through several stages: vision, slogan, canon, ideology, politics, action. His intent, with this and other works that he inclusively labels "Message Art," is to help develop the first three factors in the movement against abuse of the environment. Nading feels that visually symbolized slogans produce the deepest responses and are remembered longest.

Should any readers want to paint a "bird" at a site in their own area, they can write to Lee Nading (P.O. Box 1805, Bloomington, IN 47402) and he'll respond with a custom design.

—*Jay Kinney*

Paintings on highway pavement at 'environmental' sites that are symbolic of the way today's world is, around the U.S. Rising (→) where nature is reasserted; Falling (←) where nature is imperiled.
Local People: keep these images repainted.

IND. 2 SEP. 83 9 ft.
JINX ON BUREAUCRATS WHO SIT ON PRIORITY PCB DUMPS
(at Jct. IN-37 + n. rd. to Bennett Quarry, Bloomington, IN)

NY 22 Sep. 83 8 ft.
JINX ON DEVELOPERS OF WORLD'S LARGEST GARBAGE DUMP
(Staten Is, NY, Fresh Kills landfill: at west end of Arden St, on road to methane plant in new section)

NH 23 Sep. 83 9½ ft.
JINX ON SEABROOK NUKE
(on NH-1A, 100 yds. s. of Hampton Beach bridge, Seabrook, NH.

MASS. 24 Sep. 83 12 ft.
HOMAGE TO THE MOHAWK TRAIL GOD
(on MA-2, at Rest Area 1.3 mi. e. of US-202 exit)

NY 24 Sep. 83 7 ft.
JINX ON MIDWEST ACID RAINMAKERS
(s. side of Great Sacandaga Lake, Adirondacks, 4.6 mi. n. of Batchellerville, NY)

NY 25 Sep. 83 9 ft.
JINX ON UPPER HUDSON INDUSTRIES THAT FOUL THESE WATERS
(on I-90 Hudson Rvr. bridge, e. side, near Selkirk, NY)

NJ 30 Sep 83 8 ft.
JINX ON JOHNS-MANVILLE ASBESTOS KILLERS
(near main entr. to J-M plant, Main St., Manville, NJ)

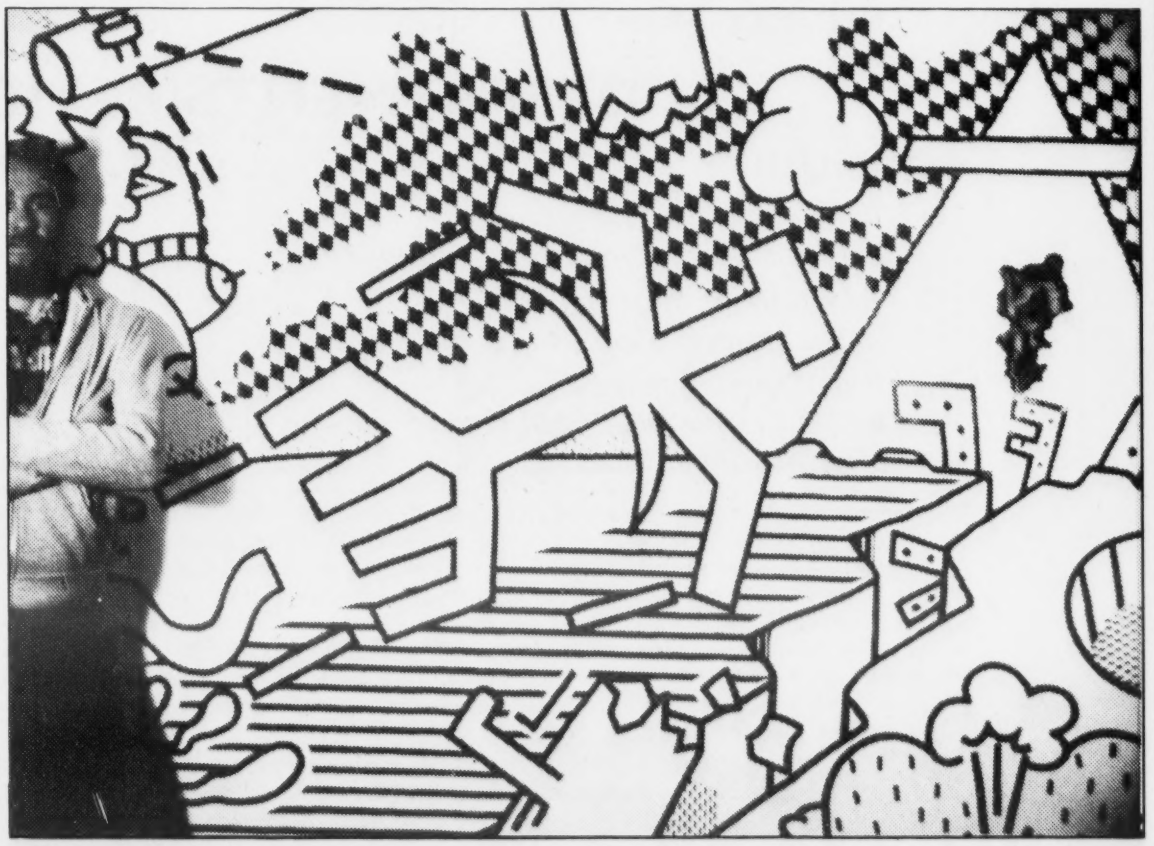
PA 30 Sep. 83 7¼ ft.
(on Hawk Mtn. rd, at H.M. Sanctuary entrance, and at Appalachian Trail xing (ne. Hamburg)

PA 30 Sep. 83 8.3 ft.
JINX ON BUREAUCRATS WHO WON'T PUT OUT CENTRALIA 20-YEAR COAL FIRE
(on street at 220 E. Park, Centralia, PA

PA 1 Oct. 83 5 ft.
SAVE THE MONONGAHELA RIVER SYSTEM
(on PA-906, 1 m. no. of Belle Vernon, PA, + I-70,) on east side of river

IL 9 Oct. 83 7 ft.
JINX ON WORLD'S LARGEST PARTICLE ACCELERATOR
(on IL-59 along s. border of Fermi Natl. Accel. Lab, Batavia, IL; 1 m. w. of Eola Rd.)

IL 10 Oct. 83 7 ft.
JINX ON UNNECESSARY HIGHWAYS
(on E-W Tollway, milemarker 105, at DeKalb, IL.)



(Left) Jinx on White River Dam and Shale Project 2.9 miles south of Bonanza, Utah, at White River Bridge.

(Above right) A page from Nading's travel journal.

(Lower right) Lee Nading and painting, "Green Journey: Forming a Covenant of Deliverance from Megaloization and Technocalypse," 6' x 9' (detail).

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COVERS

(Front cover photo, inset): *As China has adopted more liberal economic policies and opened to the West a new social group of young people called* ***liumang****, or petty hoodlums, has arisen. Making their living hustling goods through various illegal channels, many are also fascinated with the lifestyles and fashions of the West. Tens of thousands of these* ***liumang*** *have been arrested in China's recent anticrime campaign.*

(Front cover photo): *Young Chinese on the way to the Execution Ground, Taishan County, Guangdong Province.*

In public parades of sentenced criminals those who are found guilty of capital crimes such as rape, murder, kidnapping, smuggling, embezzlement, and armed robbery are denoted by large red crosses on placards they wear around their necks so that onlookers will know their names and the nature of their offenses.

After a public rally on the municipal sports field, this particular criminal was taken down to the river bank and shot in the back of the neck by a member of the Public Security Bureau Police in front of a crowd of several thousand onlookers. —*Orville Schell*

For further photos and commentary on post-Mao China, see page 30.

The paintings on the back cover are by Canadian artist Jon Lomberg and were used as part of the Conference on the World after Nuclear War discussed by Paul Ehrlich, starting on page 88. (The top two paintings are ©1983 by Jon Lomberg/NASA. The painting of the earth is ©1983 Jon Lomberg.) —*Jay Kinney*

Burying Jed Kesey

by Ken Kesey

Kesey's Athlete Son Killed

Jed Kesey, the son of author Ken Kesey, was one of two University of Oregon wrestlers killed in a highway accident in Pomeroy, Wash.

Kesey, 20, died yesterday in a Spokane hospital as a result of a head injury suffered in the Saturday accident. Two other wrestlers remained in critical condition at Deaconess Medical Center, where they were taken after the team van, carrying 10 varsity wrestlers and two assistant coaches, slid off an icy, hilly road on the way to a match and crashed 185 feet down a steep embankment.

Also killed in the accident was Lorenzo West, 20, of Portland, Ore.

Kesey's father, who lives in Pleasant Hill, Ore., is the author of "One Flew Over the Cuckoo's Nest" and "Sometimes a Great Notion," and was one of the heroes of the 1960s counterculture. He was at the hospital at the time of his son's death yesterday.

—San Francisco Chronicle
Tuesday, Jan. 24, 1984

It was the toughest thing any of us has ever had to go through, harder than jail, or my dad's death, or an OD on STP, yet it also had and always will have a decided glory. Partly, I think, because Jed was such a good kid, very loving and very loved, and the power of his being carried us through a lot of the ache. But there was also the support we got, from friends and family, from teachers and coaches and schoolmates. Without this support I don't think we would have attempted the kind of funeral we had, or plunged into the activism prompted by the circumstances of the accident.

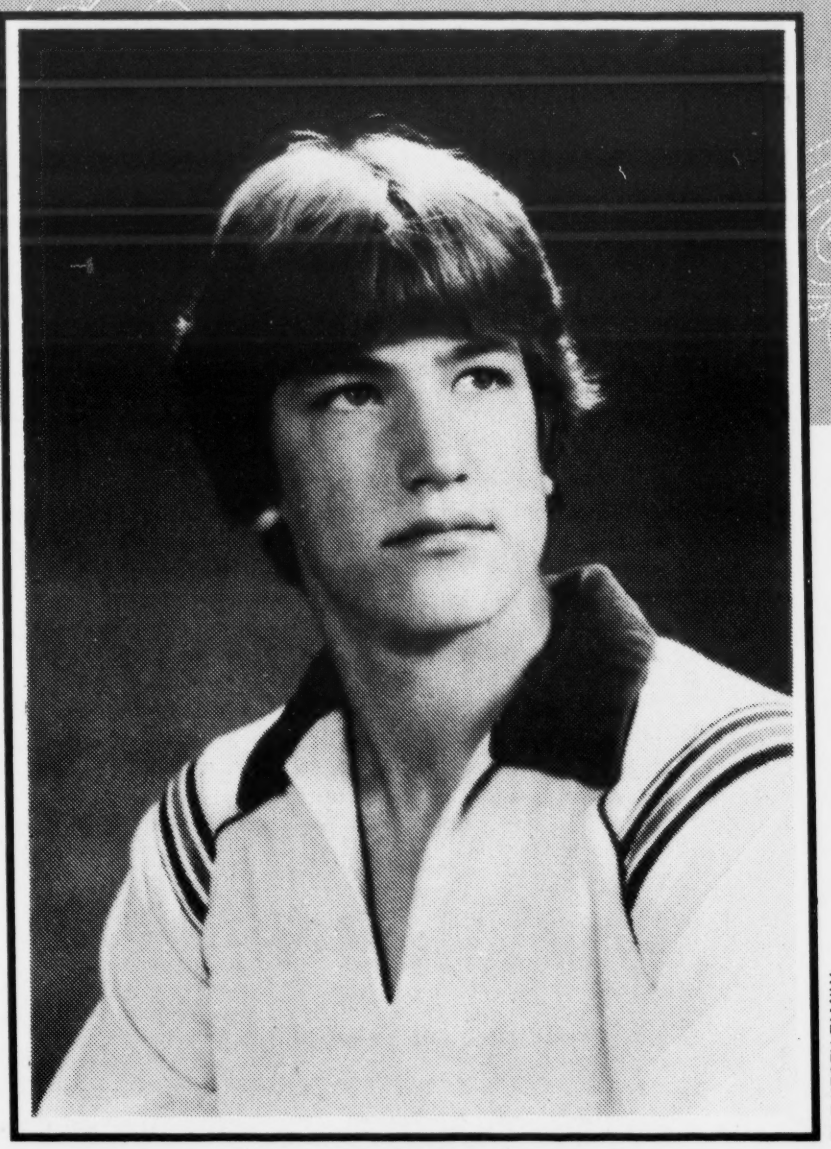
It's the funeral that I mainly want to share, because I think you guys and your constituency of readers should know that this homemade ceremony is legally possible. All you need is the land, the determination, and the family. The activism comes later but I thought I would include it; it's part of the glory. Besides, it's attached to two good letters I wrote after Jed's death. Here are parts of the letters:

---

*Ken Kesey is a novelist — **One Flew Over the Cuckoo's Nest**, **Sometimes a Great Notion**, and something forthcoming, set in Alaska, notes for which appeared last year in CQ (Spring '83). He's a longtime cohort and mentor of mine. I rolled into his house in Palo Alto in July 1963, the very week Jed Kesey was busy being born, and never quite rolled out again. Unlike many of the famous I've encountered, Kesey and Faye have always attended better to their family than to his fame, letting decades go by novel-less but no landmark large or small of the kids' lives pass without appropriate attention and ceremony. Sweet solid citizens resulted — Jed's older brother Zane, older sister Shannon, younger sister Sunshine, and Jed himself looking most like and wrestling most like his old man. The living-room rug in the Kesey home (an Oregon barn) is a wrestling mat.*

The first letter printed here is to a handful of Kesey's old buddies, Wendell Berry, Larry McMurtry, Ed McLanahan, Bob Stone, and Gurney Norman, who came of writing age together in the creative-writing program that Wallace Stegner ran at Stanford University in the early sixties. Kesey notes: "I sincerely hope that I do not — as Richard II worries — 'play the wanton with our woes,' by this display of my family's private grief and publication of my personal correspondence. I mean it only to suggest a path for others wandering in similar pain. We've all got a lot of dying ahead of us. We might as well learn how to go about it."

—Stewart Brand



THE KESEY FAMILY

Jed Kesey

Dear Wendell and Larry and Ed
and Bob and Gurney:

Partners, it's been a bitch.

I've got to write and tell somebody about some stuff and, like I long ago told Larry, you're the best backboard I know. So indulge me a little; I am but hurt.

We built the box ourselves (George Walker, mainly) and Zane and Jed's friends and frat brothers dug the hole in a nice spot between the chicken house and the pond. Page found the stone and designed the etching. You would have been proud, Wendell, especially of the box — clear pine pegged together and trimmed with redwood. The handles of thick hemp rope. And you, Ed, would have appreciated the lining. It was a piece of Tibetan brocade given Mountain Girl by Owsley 15 years ago, gilt and silver and russet phoenixbird patterns, unfurling in flames. And last month, Bob, Zane was goose hunting in the field across the road and killed a snow goose. I told him be sure to save the down. Susan Butkovitch covered this in white silk for the pillow while Faye and MG and Gretch and Candace stitched and stapled the brocade into the box.

It was a double-pretty day, like winter holding its breath, giving us a break. About 300 people stood around and sung from the little hymnbooks that Diane Kesey had Xeroxed — "Everlasting Arms," "Sweet Hour of Prayer," "In the Garden" and so forth. With all my cousins leading the singing and Dale on his fiddle. While we were singing "Blue Eyes Crying in the Rain," Zane and Kit and the neighbor boys that have grown up with all of us carried the box to the hole. The preacher is also the Pleasant Hill School superintendent and has known our kids since kindergarten. I learned a lot about Jed that I'd either forgotten or never known — like his being a member of the National Honor Society and finishing sixth in a class of more than a hundred.

We sung some more. People filed by and dropped stuff in on Jed. I put in that silver whistle I used to wear with the Hopi cross soldered on it. One of our frat brothers put in a quartz watch guaranteed to keep beeping every 15 minutes for five years. Faye put in a snapshot of her and I standing with a pitchfork all Grantwoodesque in front of the old bus. Paul Foster put in the little leather-bound New Testament given him by his father who had carried it during his 65 years as a minister. Paul Sawyer read from *Leaves of Grass* while the boys each hammered in the one nail they had remembered to put in their pockets. The Betas formed a circle and passed the loving cup around (a ritual our fraternity generally uses when a member is leaving the circle to become engaged) (Jed and Zane and I are all members, y'unnerstand, not to mention Hagen) and the boys lowered the box with these ropes George had cut and braided. Zane and I tossed in the first shovelfuls. It sounded like the first thunderclaps of *Revelations* . . .

But it's an earlier scene I want to describe for you all, as writers and friends and fathers . . . up at the hospital, in cold grey Spokane:

He's finally started moving a little. Zane and I had been carrying plastic bags of snow to pack his head in trying to stop the swelling that all the doctors told us would follow as blood poured to the bruised brain. And we noticed some reaction to the cold. And the snow I brushed across his lips to ease the bloody parch where all the tubes ran in caused him to roll his arms a little. Then more. Then too much, with the little monitor lights bleeping faster and faster, and I ran to the phone to call the motel where I had just sent most of the family for some rest.

"You guys better get back over here! He's either going or coming."

Everybody was there in less than five minutes — Chuck and Sue, Kit and Zane, Shan and her fiance Jay, Jay's dad Irby, Sheryl and her husband Bill, my mom, Faye . . . my whole family except for my dead daddy and Grandma Smith down with age and Alzheimer's. Jed's leg was shaking with the force of his heartbeat. Kit and Zane tried to hold it. He was starting to go into seizures, like the neurosurgeon had predicted.

Up till this time everybody had been exhorting him to "hang on, Old Timer. Stick it out. This thing can't pin you. You're too tough, too brave. Sure it hurts but you can pull through it. Just grit your teeth and hang on." Now we could see him trying, fighting. We could see it in his clenching fists, his threshing legs. And then aw Jesus we saw it in his face. The peacefully swollen unconscious blank suddenly was filled with expression. He came back in. He checked it out, and he saw better than we could begin to imagine how terribly hurt he was. His poor face grimaced with pain. His purple brow knitted and his teeth actually did try to clench on the tubes.

And then, O my old buddies, he cried. The doctors had already told us in every gentle way they could that he was brain dead, gone for good, but we all saw it . . . the quick flickerback of consciousness, the awful hurt being realized, the tears saying "I don't think I can do 'er this time, Dad. I'm sorry, I truly am. . . ."

And everybody said, "It's okay, ol' Jedderdink. You know better than we do. Breathe easy. Go ahead on. We'll catch you later down the line."

His threshing stopped. His face went blank again. I thought of Old Jack, Wendell, ungripping his hands, letting his fields finally go.

The phone rang in the nurses' quarters. It was the doctor, for me. He had just appraised all the latest readouts on the monitors. "Your son is essentially dead, Mr. Kesey. I'm very sorry."

And the sorrow rung absolutely honest. I said something. Zane picked up the extension and we watched each other while the voice explained the phenomena. We said we saw it also, and were not surprised. Thank you. . . .

Then the doctor asked a strange thing. He wanted to know what kind of kid Jed was. Zane and I both demanded what he meant. He said he was wondering how Jed would have felt about being an organ donor. Our hearts both jumped.

"He would love it! Jed's always been as generous as they come. Take whatever you can use!"

The doctor waited for our elation to ease down, then told us that to take the kidneys they had to take them before the life support was turned off. Did we understand? After a while we told him we did.

So Faye and I had to sign five copies apiece, on a cold formica countertop, while the machine pumped out the little "beep . . . beep . . . beep . . ." in the dim tangle of technology behind us. In all my life, waking and dreaming, I've never imagined anything harder.

Everybody went in and told him goodbye, kissed his broken nose, shook his hand, squeezed his big old hairy foot . . . headed down the corridor. Somebody said it might be a good idea to get a scrip for some kind of downers. We'd all been up for about 40 hours, either in the chapel praying like maniacs, or at his bedside talking to him. We didn't know if we could sleep.

Chuck and I walked back to the intensive care ward to ask. All the doctors were there, bent over a long list, phoning numbers, matching blood types, ordering nurses . . . in such a hurry they hardly had time to offer sympathy. Busy, and justly so. But the nurses, the nurses bent over their clipboards, could barely see to fill out the forms.

They phoned the hotel about an hour later to tell us it was over, and that the kidneys were in perfect shape. That was about four in the morning. They phoned again a little after six to say that the kidneys were already in two young somebodies.

What a world.

We've heard since that they used twelve things out of him, including corneas. And the redwinged blackbirds sing in the budding greengage plumtree.

With love,

Ken

PS: When Jed's wallet was finally sorted out of the debris and confusion of the wreck it was discovered that he had already provided for such a situation. He had signed the place on his driver's license indicating that he wanted to be an organ donor in the event of etc., etc.

One man gathers what another man spills. . . . kk

So, Stewart, we now have the beginning of our own graveyard — a big basalt headstone, an iron gate Page welded, poplar trees and honey locust that Zane and Joy Smith planted. It was simpler to do than anyone ever imagined. When the guy from the mortuary came to pick up our pine box he shook his head in awe. "Beautiful," he marvelled, "and in only a day and a night. Beautiful." And when the county health inspector came out to okay the grave site that I pointed out, all he said was, "Looks just fine to me." Because they are just people — fathers, husbands, neighbors — and they respect what they see respected. They didn't take death away from us; we relinquished it.

Next is part of a letter I wrote to Senator Hatfield. He called the other day and asked if he could use it in the Senate appropriations debates going on back in Washington. I told him okay and asked if I could do the same, send it to seatbelt advocates in our state legislature and to antimilitary groups. He said fine. Since then I have read of stiffening resistance to Reagan's obscene military budget requests.

Dear Senator Hatfield:

. . . From the very first my response to this anguish has been nagged by a terrible teeth-grinding of blame, of blame un-laid. I tried to stanch it. Don't blame, I told myself. It just hurts people. There's been enough hurt already. Turn the other cheek, I kept telling myself.

But the nagging kept on: "What if the other cheek is somebody else's kid? In some other slapdash rig? On some other ill-fated underfunded trip next wrestling season? Or next debate season? Or next volleyball season? Moreover, what if this young blood has been spilled not merely to congregate people and their feelings, but also to *illuminate* a thing going wrong?"

So I want to try to apprise you, Senator, of just how my chain of blame is proceeding:

I could blame the Oregon coach or his assistants for driving a borrowed rig over a treacherous pass without snow studs, or seatbelts, or even doors that closed properly. But these guys are already doing the best they can to scrape together funds and transportation for a "minor" sport. I could blame my alma mater for not funding the activity better. I could blame the Pacific Athletic Conference for not protecting athletes en route to sanctioned events, or I could blame the whole National Collegiate Athletic Association for fostering a situation where more energy is devoted to monitoring the ethics of the few "stars" in the sports firmament than to the actual welfare of the untold thousands of unknown athletes traveling to their minor events all across the nation.

Faye and I have received more than a thousand letters from around the nation. Most are like yours — sweet, straight, supportive. Many are from people who have lost kids or grandkids on the highways, like Bob Straub and Len Casanova. But a lot of them are from teams, the kids and coaches of wrestling teams, high school and college. Or the parents of kids on teams. And most of these letters mention at least one near scrape. Some speak of worse, like the wreck of the wrestling bus in Montana that killed nine on the same day and in the same area. One member of the Washington State College woman's crew team writes of returning from a rowing meet in Lewiston last year, over the same road that got Jed and Lorenzo. The girls couldn't even afford state vans. They were travelling in private cars. She said she came around a foggy corner and saw her sister's car mashed into the grill of a Greyhound. Her sister was dead. No one in the big bus was so much as bruised.

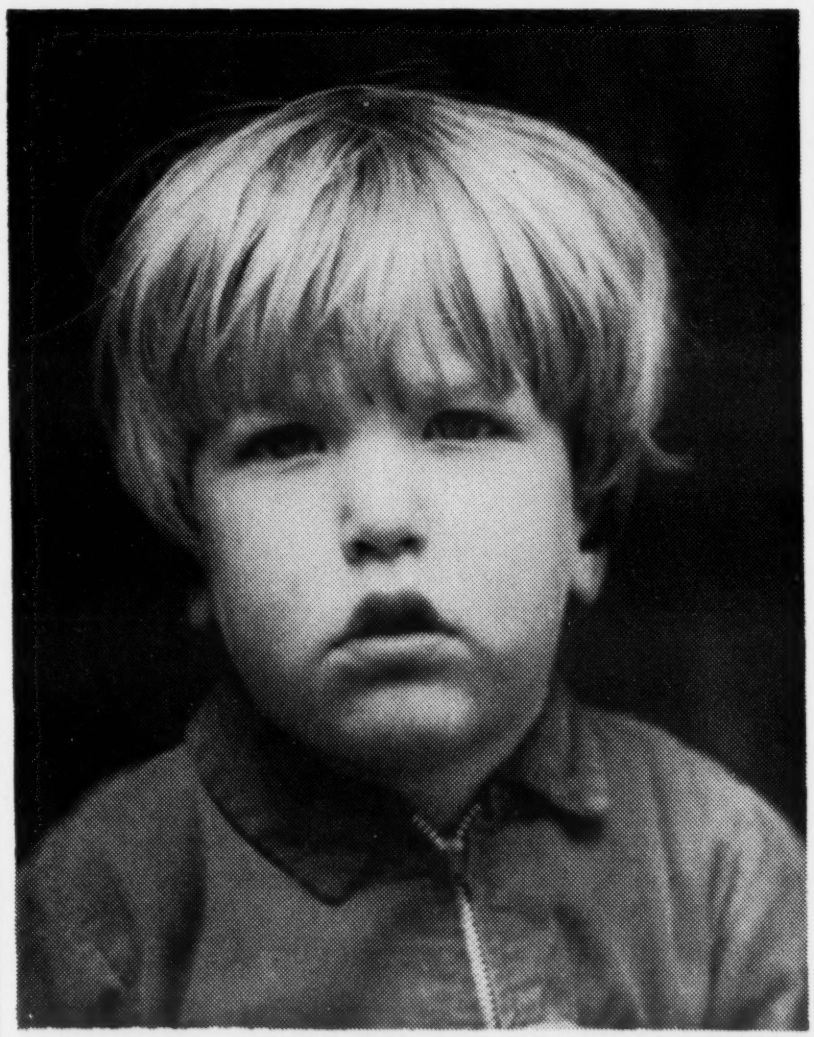
And every wrestling tournament we've attended since the accident (yeah, they still go on, and we still go; it's always been our family's fashion) has prompted a parent or

coach or school administrator to come up and speak to us of their renewed anxieties — the midnight returns from Glide down foggy I-5; battling the chiptrucks along the Umpqua; picking their way across the January passes from Redmond and La Grande and Lakeview. In rigs without seatbelts, without CBs or trauma kits, usually driven by the coach or his wife. But what can they do? they ask. It's hard enough to pass a school budget in Oregon without asking for fancy protection. Just not enough money in the communities. Nobody wants to increase property taxes, not even for safer playgrounds, let alone for safer activity buses. Sure, the kids need to be defended against the treacheries of travel, but there's just not enough money. Where are the already-scrimping schools gonna come up with the revenue for that kind of defense?

Then, the other night, as I watched the national news, it came to me. We were lobbing those 16-inch shells into the hills of Lebanon. The Pentagon spokesman said he wasn't certain exactly which faction we were hitting, but he reassured us that we were certainly hitting *somebody.* Then he was asked what each of those shells costs. The price was something enormous. I can't remember. But the spokesman countered by saying that the price for national defense is always high, yet it must be paid.

And I began to get mad, Senator. I had finally found where the blame must be laid: that the money we are spending for national

Ken Kesey wrote about Jed once before in a Whole Earth publication. It was Spring of 1971, ***The Last Supplement to the Whole Earth Catalog****, which Kesey was guest editing with Paul Krassner. He was reviewing* ***The Bible*** *("All of it. All the rest of your life."). It was a three page review, with Jed at the pivot. . . . —Stewart Brand*



THE KESEY FAMILY

Jed, age two

It's about four years ago in my hometown of Springfield. Summer. Sundown. We've just had a family supper at my folks' house and I'm driving my mom's Bonneville over to my brother's creamery. In the car with me are my daughter Shannon, my youngest son Jed, and my dog Pretzels. The radio is playing and Shannon is prattling plans and the windows are down to the full-ripened Oregon day. . . .

(I've told this tale a lot since, and each telling has drained a little from the event. I've tried to be judicious in my allotment of the tellings because of this depletion. I hope I can tell it this time for good and save what's left for my own lost times ahead.)

We're traveling on old West Q Street, which used to be the main artery to Eugene before the freeway came in. The house where my mother and father and brother and I lived all our school years until Chuck and I left to get married is just up ahead, dwarfed now by the freeway that came by a few years ago like a sudden river of cement and Chevies. This was the river that forced my folks to seek higher ground in the tract house where we just ate. I never lived in the tract house so the old house up ahead there on West Q is still what I consider home in my sentimental mind. I used to lie awake late across my bed with my front teeth resting on my windowsill until the sill was gnawed paintless. I could see past the raccoon cage, the blinking radio tower of KEED and beyond that the friendly outline of the Couburg

defense is not defending us from the villains real and near, the awful villains of ignorance, and cancer, and heart disease and highway death. How many school buses could be outfitted with seatbelts with the money spent for one of those 16-inch shells?

I know it's a radical notion, and I have no idea what to do about it. There are going to be a lot of lawsuits coming out of this tragedy; there will be no other way the Topliff family can afford a boy paralyzed from the neck down; there will be no other way to force new safety regulations. It's going to be a real tough battle for a lot of folks who are already badly wounded, and it's going to be messy. And I'm afraid the real villains will squirm away again.

Help deal with this, Senator. Please. Talk about it. Talk about bringing some of these umpteen billions back home, back into the vulnerable guts of this nation where our dollars can actually be used for our actual national defense. I intend to begin work on it, in whatever ways I can find. I may have to join those old long-haired peaceniks on the railroad tracks when the next White Train full of nuclear warheads rolls across our land. Just like in the sixties. I guess it's kind of old fashioned, but it looks to me like it's the job God has dealt this hand around.

Thanks for listening to me ramble.
I remain,

Sincerely,

Ken Kesey

hills where a little logging train used to come from a few times a week at 11:45 p.m. and then fewer times and fewer times until, well, I guess it's been clear back in high school I can last remember hearing that whistle, lying there blinking out past the coon cage at my mysterious futures, thinking, "Someday I'll go someplace on that train. . . ." but it stopped running and I grew up and now, here it is, ten feet away coming across the road and the Bonneville is already on the tracks and for once added power is important and I tromp at least the front half of the car across before that awful black noise running on a track red with rusted neglect ripped away everything from the backdoor back and sent the rest spinning on down West Q.

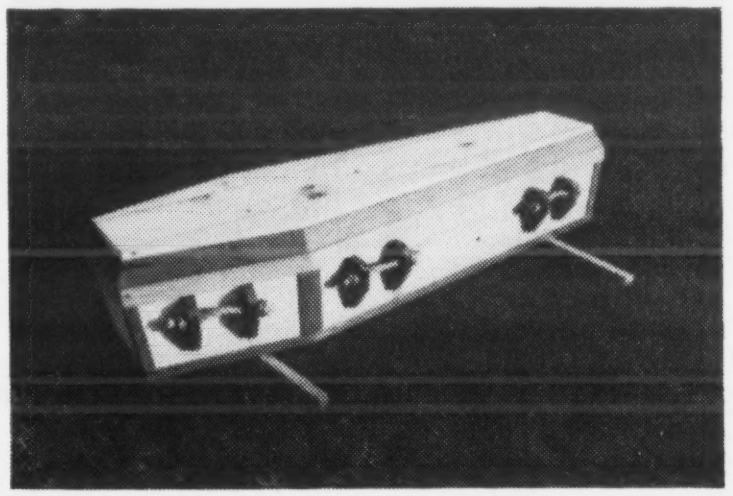
Shannon was crying and bloody. The Walkers, our old neighbors, were helping her from the mangled door. My head hurt but I felt whole. On the floor my little dog whimpered, her teeth through her lip. The train was stopping somewhere behind me. Where was Jed?

I picked him up and carried him into the Walkers'. He didn't look hurt anywhere but *oh* he was such desolate heaviness in my arms. I sat down in a chair, holding him. And he sighed, a curiously familiar sigh though I'd never heard another like it before, and I felt the life go out of him as though that soft sound were wings assigned to bear its essence gently away. My ear found no beating at his chest. I looked up. There I sat across the room in the Walkers' big dining-room mirror, holding my dead son in my arms. In the middle of my forehead a two-bit-sized bone plug had been punched neatly from my skull and hung on a piece of skin like an open trap door; the hole and the plug joined thus formed a bleeding figure eight. I blinked at my garish image and thought "if anything ever counts, this counts." Then I closed my eyes on my reflection and called aloud:

"O dear Lord, please don't let him die."

Then things became completely calm. Shannon was trying to hush her crying; the Walkers stopped rushing about and talking and waited . . . the frantic phoning paused (things will make a space) . . . then I knew what to do. Opening my eyes I leaned back to Jed and began to give him mouth-to-mouth resuscitation. The ambulance drivers came in but made no move to interrupt me, though one of them reached down and neatly popped the plug back in my forehead while I worked over Jed. Finally Jed sighed again, the same soft wings except this time they bore the life back into its sacred vessel.

I knew I had participated in a miracle and I was absolutely amazed. As the days went by and Jed drew out of danger in the hospital I found that it wasn't the miracle that had amazed me. That returning sigh will sound through all the rest of my life and I will be ever thankful. What amazed me, though, was that when the chips were down I knew *where* to call, and that I knew Who answered. I had interceded in my son's behalf, and talked the powers into letting us have him for a time more, Thank God. ▷



BRIAN LANKER

The Coffin

by
George Walker

When I was asked to build Jed's coffin, my first thought was of regulations. I was expecting to have to meet some long, convoluted list of government requirements. Sealed, Inspected, & Approved, that sort of thing. Not so, I quickly discovered upon inquiring at the mortuary. I could not only build the coffin, I could even buy a kit! The Plain Pine Box, I believe it was called, and it was exactly that: a few straight rough pine boards cut to length, a handful of nails, and simple, easy instructions. It was OK, but not what I had in mind. I wanted to build something more personal, and with more class.

I didn't have a design to work from, but I had an idea how I wanted it to look. I drew a few rough sketches and we started from there. George Proddock, Kesey's stepfather Ed Jolley and I all worked together at building it, which helped get it done in time, and also made it more interesting as we tried to think our way through the many complex angles we had to cut and fit. This was to be no straight-sided rectangular box, but rather a complex tapered hexagonal shape. I thought of our trip to Egypt as we laid out the plan, trying to duplicate, as my mind's eye remembered, that exact proportion of the sarcophagi. After several attempts and erasures, I got a drawing that "looked right," and we laid it out full size and cut it from a sheet of 3/4-inch plywood. This was to be the floor of the coffin; we would build up around it.

"Dang, it really looks *small,*" everyone thought. Six feet six inches long and almost two feet wide at the shoulders, tapering in at both the head and the feet, it did indeed look undersized. We took turns lying down on it to convince ourselves it was adequate before going ahead with construction. We still didn't know exactly what we were going to build; we designed it as we went along. I don't really recommend this method of building, as opposed to having a complete plan, as it's easy to go astray. My experience in boat carpentry helped get us over the hard places, as boats are generally built without straight lines or right angles, and the pieces are hand fit.

We selected some clear white pine boards for the sides and top. Nice looking and easy to work with, pine is also traditional. In addition to tapering the sides in "toe-pincher" style, we angled them out wider at the top. This made the job of fitting the corners immensely more difficult, as every cut was a compound angle. It wasn't necessary to do it that way, but it looked better, and somehow that made it important.

> I made it on the bevel. . . . A body is not square like a crosstie. . . . The animal magnetism of a dead body makes the stress come slanting, so the seams and joints of a coffin are made on the bevel. . . . It makes a neater job.
>
> —William Faulkner,
> *As I Lay Dying.*

It also makes a longer job. We worked well past midnight for two days, carefully fitting thin redwood trim strips around all the edges, dowelling and splining the seams in the top, hand-rubbing to finish . . . massaging, a work of love. Rope-work handles were added, again calling on skills learned in my years as a sailor. To complete the job, the interior was padded and lined with a fine old tapestry. All this in time to deliver to the mortuary, where the body had been prepared.

It was a very good coffin, as coffins go, very beautiful everybody said, and certainly a labor of love. But I don't really believe that is the point. The real value of that coffin was in the doing, in the building of it ourselves. Not in the coffin, as a thing, but in the act of creating it, as an event. It made us all feel better to do this ourselves, to take charge of things as much as we could, not just the coffin but the burial as well. Perhaps it's because, when we lose someone close, particularly someone young and in the prime of life, we feel more than a little burned that things have been jerked so irrevocably beyond our control. Anything we can do to regain our handle on events is gratifying.

Whatever the reason, all who kept themselves actively involved in getting Jed buried agreed: we all gained something through our efforts. We felt better about it than if we had just turned it all over to the professionals, and gone about our business of feeling bad. So, I would say to anybody who feels that they might want to give it a try when someone close dies, absolutely yes; build it yourself. Even if you can't do basic carpentry, you can nail together a kit. If you do have skills, you can make something that will make you feel good long after it's buried out of sight. It doesn't have to be fancy; simple and neat is just fine, but *do* make it strong. You'll be surprised by the weight. ■

Winter's Tale

A master thief, a bridge of light, the coldest winter in memory, and a horse that flies — only part of the complex search for the perfectly just city. In ***Winter's Tale****, Helprin ties together his narrative in language so rich and descriptive that it makes you smile with pleasure as it rolls off your tongue. This is a book about intertwined lives and the keeping of faith, how magic lives in the middle of suffering, and the power of love. There is nothing naive in Helprin's optimism, either. This is a book for anyone who harbors secret or not-so-secret dreams about changing the world for the better. A breathless delight.*

—Sallie Tisdale

[Suggested by Anne Dambrowski]

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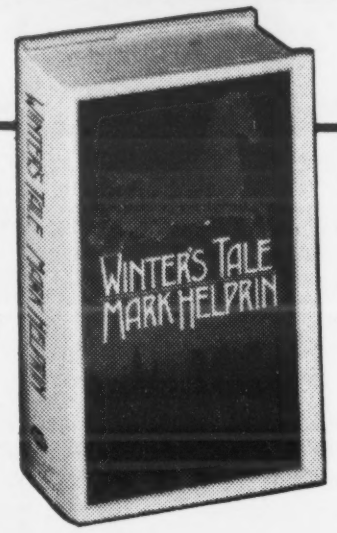
Every city has its gates, which need not be of stone. Nor need soldiers be upon them or watchers before them. At first, when cities were jewels in a dark and mysterious world, they tended to be round and they had protective walls. To enter, one had to pass through gates, the reward for which was shelter from the overwhelming forests and seas, the merciless and taxing expanse of greens, whites, and blues—wild and free—that stopped at the city walls.

In time the ramparts became higher and the gates more massive, until they simply disappeared and were replaced by barriers, subtler than stone, that girded every city like a crown and held in its spirit. Some claim that the barriers do not exist, and disparage them. Although they themselves can penetrate the new walls with no effort, their spirits (which, also, they claim do not exist) cannot, and are left like orphans around the periphery.

To enter a city intact it is necessary to pass through one of the new gates. They are far more difficult to find than their solid predecessors, for they are tests, mechanisms, devices, and implementations of justice.

Winter's Tale
Mark Helprin
1983; 673 pp.
$15.95
postpaid from:
Harcourt Brace
Jovanovich
1255 5th Avenue
San Diego, CA 92101

or Whole Earth Access



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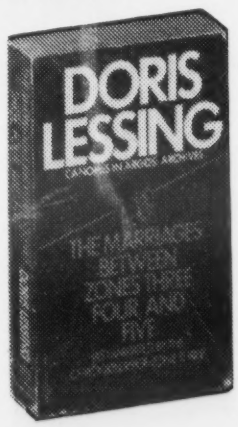
Virginia often accompanied Hardesty and Marko Chestnut on their long walks in search of forgotten architecture and revelatory views. When they found a subject, she would wander off to the side, to a scrub-covered lot or a flight of stone stairs, and watch them work. While they sketched and made notes, she would fix her gaze upon a scene, either the one they had chosen or one close by. For example, she might watch the afternoon light against a carved facade of reddish stone, and see that the light and the stone were in love, and that they moved back and forth in sympathy like two sea fans in the same transparent current. She could hear in the traffic a white sound that threw veils across the present and allowed her to hold the scene to her the way that she held her own children — fighting time, conquered by it, ravished by it. For she believed that only through love can one feel the terrible pain of time, and then make it completely still. She followed the sway of reeds in windy, broken, summer lots, until they swayed no more and she saw them motionless and within a stopped frame. And then she would walk back to *The Sun* and write essays that drove Craig Binky and his readers crazy, because Virginia saw the world not as a system of material blocks in which one thing was connected to another, but, rather, as a magnificent illusion of the spirit.

The Marriages Between Zones Three, Four, and Five

In a story filled with compelling metaphors for our time, Lessing speaks especially to the relations between men and women, and how these affect our whole fabric of life, with the different zones expressing our own opposites, complements, and ideal and shadow sides of ourselves and our societies.

The rules of two zones so opposite in nature, yet both experiencing stagnation and a dangerous drop in birth rate among animals and people alike, are ordered by rulers above to marry. Independent Al•lth, of a creative, telepathic people who have known nothing but inner and outer peace and equality for all memory, must go to brutish Ben Ata of Zone Four, a land of armies, war, and hierarchical relations. The frustrations and pain of their being together, their learning from each other's differences, and the love that grows between them, affecting both zones, is movingly expressed in the changing sexual relations of the two, which sensitively represent the struggles and growings so many men and women are experiencing within and between our selves today.

The Marriages Between Zones Three, Four, and Five
Doris Lessing
1981; 256 pp.
$5.95
postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth Access



And then, when they are truly married and their attempts to understand what is going on in the larger world and their relations to it have begun to make a difference, a new order comes that changes everything . . .

—Becca Harber

Of Lessing's five amazing "Canopus in Argos" books, this is the one she regards as the most fully realized. So she said at a lecture my wife and I attended recently — after devouring this very book. It's an ideal wedding present. It helps take the ideals out of marriage and replace them with respect for the relentless paradox at the heart of the matter. *—Stewart Brand*

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He let out a groan. "It seems there is something I can learn from you," he said, and it was not in a child's voice.

She nodded. Looking at each other, they saw only that they were unhappy, and did not know what to expect from the other.

She it was who got up, sat by him on the couch, and laid her small hands on both sides of his great neck as he still lay prone, chin on his fist.

He turned over. It was an effort for him to face her.

He took her hands, and lay there on his back, she sitting quietly close to him. She tried to smile, but her lips trembled, and tears rolled down her face. He gave an exclamation, and pulled her down beside him. He was astounded that his own eyes had tears in them.

He tried to comfort this strange woman. He felt her small hands on his shoulders, in a pressure of consolation and pity.

Thus they fell asleep together, worn out by it all.

This was the first lovemaking of these two, the event which was fusing the imaginations of two realms.

Take Care of Your Heart

If you are one of the 40-or-so million persons in this country who have heart problems or circulatory system disease, ***Take Care of Your Heart*** *belongs on the top of your reading list. The authors have given us a remarkably clear, easy to read, and thorough presentation of a very important topic.*

The book appropriately begins with a focus on prevention — how to keep your heart healthy through stress reduction, diet, exercise, smoking cessation, weight loss, etc. At every step the authors provide practical advice and give reference sources for more information. The next section explains how the heart works, a terribly complex topic that is discussed in depth but is made quite clear and understandable. The remaining majority of the book is devoted to the diseased heart, covering diagnostic procedures, state-of-the-art medical and surgical therapies, and living with heart disease. The chapter on CPR (cardiopulmonary resuscitation) should be read by everyone. A detailed glossary at the end of the book should help you wade through some of the unavoidable medical terminology.

Take Care of Your Heart *is a consumer's guide to cardiac care, both in health and illness. It succeeds in being a true reference work and covers its subject completely and with attention to detail. I recommend it highly.*

—David S. McWaters, Pharm. D.
Planetree Health Resource Center

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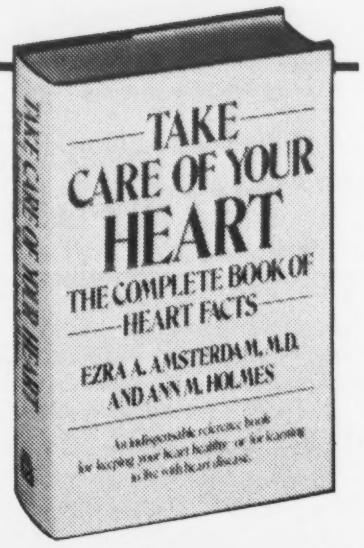
One of the most important things you can do for yourself is learn to recognize the symptoms of angina and the early warning signs of a heart attack. If you or any member of your family, or an associate at work, has any of these symptoms, call your physician immediately. If your physician is not available, the patient should go to the nearest emergency room. Remember, not every pain in the chest is indicative of angina or an impending heart attack—some symptoms are far more common than others and they may be meaningless. On the other hand, it is vitally important to keep in mind that, of the approximately 350,000 people each year who die from heart attack before they reach the hospital, the average victim experiences one or more symptoms, often three hours or so before the "sudden" fatal event occurs. . .

Take Care of Your Heart
(The Complete Book of Heart Facts)
Ezra A. Amsterdam, MD, and Ann M. Holmes
1984; 343 pp.
$14.95
postpaid from:
Facts on File Publications
460 Park Avenue South
New York, NY 10016
or Whole Earth Access



1. Your heart is located close to the center of your chest, not on the left side. Pain usually starts here—sometime it feels like a weight—as though someone or some object was pressing on your chest. The feeling of pressure or tightness in the chest is very common.
2. If you are having either a heart attack or an attack of angina, the pain can radiate or spread down the left arm.
3. Pain due to heart attack or angina can also radiate to the shoulders, neck, jaw, and both arms. Sometimes, a feeling of fullness in the abdomen and a burning sensation accompany this pain. Unfortunately, these feelings may be mistaken for indigestion.
4. Pain can occur in all of these areas at once, or it may vary. Shortness of breath, a feeling of nausea, and sweating may also occur.

The Insider's Guide to Health Foods

This book is wonderful, timely, and much-needed. David Armstrong, a longtime advocate of health foods, is also a very tough, uncompromising journalist, who became appalled at the widespread huckstering he discovered in the health-food industry as a reporter for the excellent (and, alas, now defunct) trade publication ***Whole Foods****. In his book, he sets the record straight. He praises the many beneficial health foods (whole grains, fresh fruits and vegetables, sprouts, some vitamin and mineral supplements). He provides clear, intelligent perspectives on health-food controversies (vitamin supplementation, herbal healing, organic produce). He also debunks many myths. (Frozen yogurt is not yogurt. Some "sea salt" is identical to ordinary salt, except it costs four times as much.) Best of all, he looks behind the labels at the companies that produce health foods. This book truly lives up to its title. It is an insider's guide to the $3 billion-a-year health food industry. It's comprehensive, fascinating, and very useful to anyone concerned about healthy eating. If you spend your food dollars on health foods, it's a wise investment.* *—Michael Castleman*

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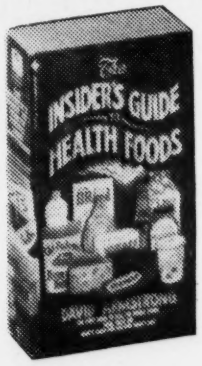
As an ingredient in cosmetics, aloe vera is perfectly legitimate. As an "essential" food supplement or medicine, it may be something else again. Supplement sellers claim that aloe vera helps clear up this mind-boggling array of diseases: acne, psoriasis, liver disease, rheumatism, bladder and kidney infections, herpes, colitis, diabetes and hypoglycemia, and cancer. Aloe vera is also sold as a treatment for headaches, wrinkles, high blood pressure, hair loss, constipation, leg cramps, insomnia, arthritis, bursitis, backaches, tendonitis, impure blood, and pain.

The Insider's Guide to Health Foods
David Armstrong
1983; 274 pp.
$4.75
postpaid from:
Bantam Books
666 Fifth Avenue
New York, NY 10103
or Whole Earth Access



Such claims are often made at public meetings by "satisfied customers" who "spontaneously" tell the gasping group how aloe vera helped them. Extravagant claims are also anonymously published and distributed in leaflets free for the taking in health food stores. A leaflet I picked up carried this unconvincing disclaimer: "This is educational literature and is not to be displayed with or used to sell products." The disclaimer was unconvincing because the leaflet was stacked on a shelf stuffed with aloe vera products.

As with any newly popular item, there is no standard of identity for aloe vera, and charges and counter charges fly in the health food industry about who is supposedly diluting their aloe vera to make a killing. A person who buys aloe vera must use trial and error to find a brand name he or she trusts. Again, ask retailers and manufacturers for additional information if label claims and advertising don't tell you what you want to know.

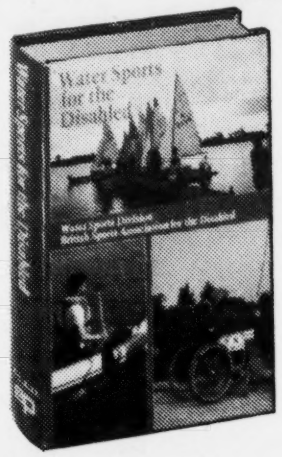
Water Sports for the Disabled

The resourceful British Sports Association for the Disabled brings us this very well-experienced handbook intended to encourage the disabled to get out onto (and even under) the water if they can. The book is quite convincing that more can than most people think.

Who'd have thought that a kid with Down's Syndrome could be taught to kayak? Or that people with missing legs could water ski? (Blind folks can too.) The book doesn't just hype such feats, it tells how to do them, or help someone else to. Lots of photos of real people doing amazing things make the accomplishments seem real and attainable — if they can do it, so can you. The instructions are pretty detailed too, right down to the little things like where you grab a person to help them back onto the dock. The book abounds in people being wonderful.

—J. Baldwin

Water Sports for the Disabled
British Sports Association for the Disabled
1983; 272 pp.
$16.95
postpaid from:
Sterling Publishing Company
2 Park Avenue
New York, NY 10016



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SHELVING BEACH

For a person who uses crutches, walking across a beach may be very difficult. Equally, a wheelchair tends to sink in. However, in both cases the student can get close to the water with some assistance. Mask and fins should be washed in sea water and freed of sand. If he cannot walk, the student can transfer from the chair to a sitting position on the beach, and then move on his hands through the swash zone into the water until it is 0.3–0.6 metres (1–2 feet) deep and he can almost float. Then he can put on the mask, and the fins if they are of use. If aqualung gear is being used, a friend should bring out the tanks and weightbelt and help the diver to put them on. The diver should then swim through the waves straight out into deep water, taking care not to scrape his knees on the bottom.

The Cripple Liberation Front Marching Band Blues

I would say that this book made me laugh out loud except, as Milam points out, we polios can't laugh out loud. We can cry, get angry, and appreciate superb writing as well as anyone, though. ***Cripple Liberation Front*** *makes me do all these things.*

Milam describes three phases of his life — his paralysis and partial recovery from polio, his lonely, incomplete life in the U.S. on his "silver wings" (crutches), and his groping, ambivalent attempts to express his homosexuality, attempts which are finally realized in Europe. We get a fully rounded picture of Milam as a breathing, complicated, real man — it's not just another, "I was a Courageous Cripple" memoir.

Milam describes the existential horrors of paralysis, dependence, and hospitalization in a lyrical prose style that never overlooks the gritty details—bedpans, hospital food, insensitive nurses. This same ease at describing wretched situations with elegance, fierce irony, and self-critical candor continues through the book. The chapter on the Great Crip, FDR, is poetic and gives us an insight into Roosevelt's character which has remained undiscovered by able-bodied historians. ***Cripple Liberation Front*** *transcends the narrow category of the cripple book — it is a work of beautifully written literature, a treasure for anyone who enjoys seeing the English language stretched to its majestic limits.*

As a fellow cripple, I admire Milam's courage and honesty. As a fellow writer, I envy his courage and honesty.

—Mark O'Brien

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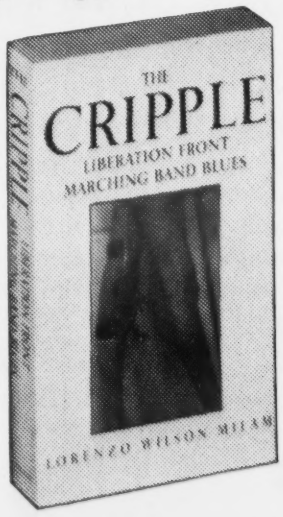
I am the last to deny that there are problems when commencing passion in the wheelchair. The logistics of weakened (sometimes non-existent) arm and leg muscles, being intertwined with other weakened arm and leg muscles, can lead to especial frustration. Atrophied quadriceps riding hard atop atrophied gluteals — or the atrophied opponens policis in proximity to a partially atrophied *mons veneris*: these do salt and pepper the potato of passion. Logistically, socially, practically, emotionally — it's a mess. There are no block-and-tackles, pulleys, or choke-levers designed to make the intricate task of interpenetration easy for your average basket case.

The puritan mentality that runs Warm Springs — or any of the hospitals, then and now — is not about to make it simple for us to exorcise the fire down below. They are going to provide no Brace Shop fixtures to unite us with spring and metal, to provide flexion joints to get us hip-to-hip, lip-to-lip. There are no cord-and-ring exercise devices which will encourage, as a form of positive physical therapy, two patients, with an arm here and a leg there, the wherewithall to come to a fantastic spastic rhythmic clash and climax: not on your sweet biddy. The staff isn't going to make our task of extinguishing the holocaust legal, gentle, easy, or right.

The Cripple Liberation Front Marching Band Blues
Lorenzo Wilson Milam
1984; 220 pp.
$10.95
postpaid from:
Mho & Mho Works
P.O. Box 33135
San Diego, CA 92103
or Whole Earth Access



METANOIA: MEDICINE

by Irena Rusenas

Illustrated by Matthew Wuerker

Daniel Hector Stiel was delivered by a midwife eleven miles outside of Mason City, Iowa, and circumcised in his sixth year by Dr. Romer, who also removed the boy's tonsils. Dan grew among cornfields . . .

Agnes Teresa Smiley was baptized into the Roman Catholic Church and in due course sent off to the nuns at St. Bridget's. Agnes had neat handwriting and no difficulty with Latin, algebra, or discipline.

Jane Patricia Foreman's father flew to Pittsburgh from assignment in Uruguay to attend the christening of this child whom he had hoped to call James Patrick. At two, JP began to ask too many questions.

Paul Zhansky was released by cesarean three minutes after his wombmate Philip; their mother had wanted in the beginning of her ninth month to be thus unburdened of twins and acquiesced to a tubal ligation.

Dan sprang from cornfields; he carried six feet of Iowa shyness to college, and hid himself in verse between Chem 101 equations:

> The blood of still-born princes
> Is flowing through the veins
> Of those who touch the silver light
> And shiver at the pain.

Secrets throbbed as poems in the virgin male pre-med; an aberration he confessed in his sophomore year to a red-head met at orientation, wooed through Intro Psych, loved since Groundhog Day five weeks ago: Susan. They slid into each other without pain; they made love in her single bed on the sunporch at dawn through the spring of 1968. After, Dan would press his buttocks to the wall, hips skimming the edge of the wet spot in the center of the mattress; head propped to see her return from the kitchen where she heated just enough water to pour into two mugs of Swiss Miss with Miniature Marshmallows powder: "Poems, on the chair, under my jeans," he said one morning before she leaned against his belly for the

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Metanoia is not your run-of-the-mill word — it is not even listed in many dictionaries. When you do find a definition it turns out to mean "a fundamental transformation of mind or character," in this case the changes that medical students go through on the way to doctorhood. The four metanoids portrayed here are composites of both real individuals and poetic license.

Irena Rusenas lives and writes in Pennsylvania. This story previously appeared in ***Wild Onions****, the literary magazine of the Milton S. Hershey Medical Center of the Pennsylvania State University.* *—Jay Kinney*

hour of sharing hope and hot chocolate before classes to which she often walked without a shower, scenting the day with fragrance of love. Now, the beat of his heart drumming rhythm into her spine, she opened the manila folder and tilted her thighs so he might follow the music of dreams in her lap. Dan watched sunbeams dance in the strands of auburn, henna, gold that made red hair; while she sifted his harvest gleaned from the margins of physics, calc, or biochem: "These are weird," Susan finally said with an embarrassed giggle, "I mean, for somebody who's going to be a doctor." Dan aced Embryo, Comparative, and all three quarters of Biochemistry. He surfaced for a moment on one minor application; in the box labelled HOBBIES, Dan wrote: I shoot groundhogs.

Agnes put aside the bargello — she had stitched in diagonals of plum next to forest green and hoped today to add cream yarn. By tomorrow the tennis racket cover would be wrapped for Alan's birthday — gift for the T3000 he carried to the club on Thursdays at seven o'clock. Aggie leaned her deck chair back against the wall so the sun would freckle her face and talked away her broken engagement to an Italian man who fixed something in the world of computers but would not clean the toilet bowl — leaving it to Agnes, who didn't mind, when she came for weekend stays. "I didn't think I could satiate his need for my time. It was hard enough getting through grad school — I spent more energy telling him I couldn't go out than finishing my experiments. He'd sound so sad — I'd feel guilty — so the next weekend I'd drive three hours to his place in New Jersey and scrub the apartment with a toothbrush, do the laundry, press his shirts, fill the refrigerator, find something new in Julia Child for dinner, and try to stay awake while he made love to me. He would light the candles, tell me how beautiful I was, how capable, how he couldn't wait till I finished with the Ph.D., we got married, and he would have me around all the time. He cried when I returned the diamond. He said his mother really liked me, too." Halfway through the second pitcher of frozen daiquiris (she would remember it as the summer of the daiquiris — the last luxurious summer) Aggie turned again from the intricate bargello pattern to Pat, her friend, her confidante since the year they both began developing breasts at St. Bridget's: "I wish they made a profession where people could just love. Purely do nothing but love in all the little Hallmark ways — and make a living at it. Do you know what I mean?" Pat, three years past her MBA, bending a corner of the page to mark her progress in *Games Mother Never Taught You,* thought she knew what Agnes meant: "You'll learn that in medical school next year. Substantial ways to transform the love to healing."

JP was presented with the spectacle of her sister's madness. She feared some guilt for this, for having played Third Degree Sibling Rivalry when they were kids, for generally winning. To expiate, to better understand young Alice, JP sought out the occasional state of her own mind that best approximated "Alice when ill" and in her second-floor apartment six blocks from the Penn State campus developed the "Stand Outside My Self Observing Shadows Cross the Continent of Mind" game. She would make herself aware: this is how my desk appears to me in the morning when the cat is fed, the dishes done, and I have time to read ten pages of *Man and His Symbols* before physical chemistry class. She would then touch nothing on the desk during sunlit days, waiting, sometimes for a week, for a sliver of shadow. Then she would note the appearance of the surface of the desk into a blue spiral notebook:

> The spines of the book are not in alignment — they made a compulsively straight line when I set this up last Tuesday. I didn't notice scratches next to the blotter — those scratches *weren't* there! — I should refinish the damn thing — there's always something to be done. The angle of the letter opener seems wrong. (I set it the way it pleased me most, I thought.) The cigarette burn looks like a crater — probably the first thing people notice — think me a slob. The whole desk is such a piece of junk!
>
> No time to note more — must run to chem exam — I'll feed Cleo later — have to pick up the mess before Gerry gets here this evening — must make a good first impression.

The game expanded from details on the desk to notes of whole days and by her junior year, JP had filled the drawer of her nightstand with pocket spirals. On a Saturday morning in April, she took the phone off the hook, put Mozart concertos on the stereo, arranged her spirals in chronological order, and examined these crossings into her darker world. By that evening, JP understood she would be spending the summer, her last, in the home of her parents, in the bedroom she shared with her sister. She typed herself this note as protection from the fear that paralyzed her when Alice's eyes grew glazed and words poured forth in disassociated torrents:

1. I know nothing for certain; at any moment I am the sum of perceptions which depend on what I have eaten, the barometric pressure, who I spoke with yesterday or hope to speak with tomorrow, and a thousand other things of which I am not aware.
2. Despite this ignorance, I must still make decisions, form opinions, and otherwise operate within what I construe to be reality. As does Alice. The sum of her perceptions, however, seems to have been totalled without sunlight, as if her world were compiled from my "shadow" spirals, a place where everything moves too fast perpetually under deep cloud cover.
3. I must remember not to say to her, "Don't be silly."
4. I don't know why I have the gift of sunshine and she does not and forgive myself a) for not knowing b) for being unable to push away the darkness for her.
5. The glaze over her eyes signals a departure to hell. At such time, DO NOT RUN: touch, allow being touched.
6. If I can cross from my sunshine to her shadows, perhaps she might learn to make the reverse journey more frequently, for longer periods.
7. Begin a new spiral to note sensations in sunlight.

JP then telephoned Gerry, described what she understood to be the nature of her sister's disability, quoted some entries from her spirals, apologized that she would not, after all, be on campus through the summer, and, after some prodding, read her summary into the receiver. Gerry had said little throughout — tired, thought JP. And frightened — insanity engenders the sort of panic from which people run without pausing for the family photograph album — this may well be the end of Gerry. "Well, thought I'd better let you know. I'd better go now," JP finally allowed into the silence. "Wait, hold on a minute while I get my calendar." From habit, JP opened her own appointment book. "OK," Gerry was back on line, "Turn to July 27-August 3. Got anything on?" It had become their way of making dates.

"No. No, but I just told you I'd be in Pittsburgh."

"OK. Ink in," pretending not to hear her, "Camping at Assateague with Gerry. Alice can spare you for a week. And by then you could probably use some real sunshine. OK, hon?"

"Gerry . . . thanks."

"I'll see you for dinner after your MCATs next week. Enjoy studying!"

Paul didn't see his brother die, but he took Claire to the shoulder along Route 39 where the old Pontiac had chewed gravel, then flown against what the police report identified as "utility pole 3987." The force flung the driver. "My brother," Paul told Claire (and a succession of women through the years), "landed right about here." He would straddle a spot in the northbound lane, rocking from his heels to the balls of his feet, his calves, his thighs tensing with the motion. Claire thought she saw a stain darkening the dolomite chips between his feet and imagined the spot may have been rusted by a pool of blood from that time. "The old woman who lives in that house across the

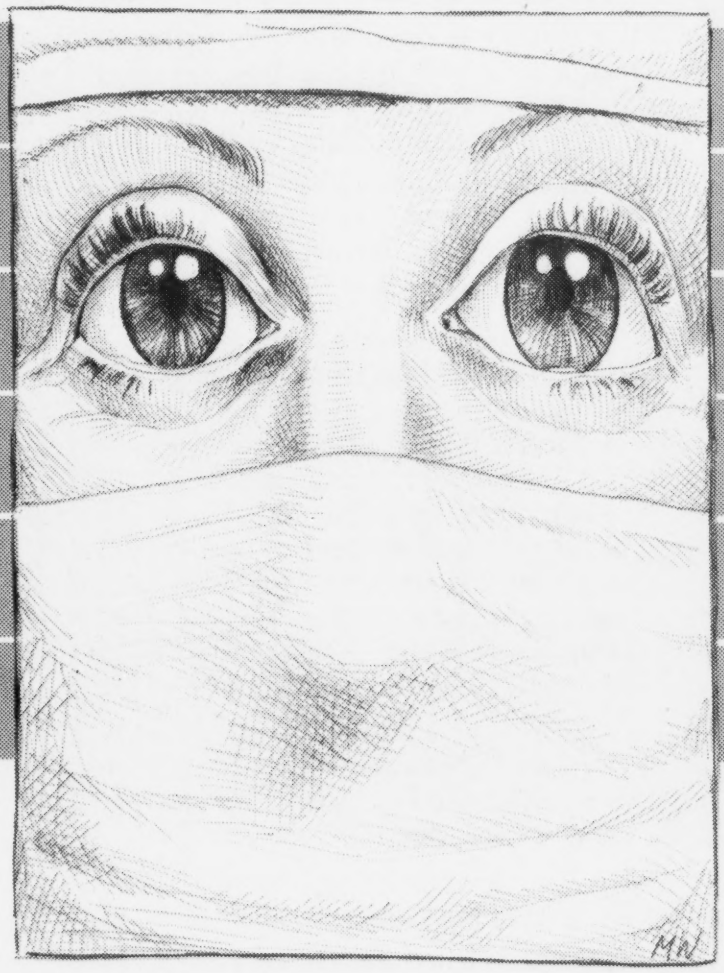
street," Paul would say, pacing from his stance on the highway to the safety of the shoulder. "The old woman," he would raise his voice to be heard over the rush of a passing car, "she saw Philip stand up and walk to the grass over here. She's the one who called the ambulance. They said he died of a broken neck."

Claire (and a number of women after her) squinted against the sunlight into Paul's incredibly blue eyes and asked, "People with broken necks can't walk, can they?"

"She said she saw him stand up. She said he walked over to here. He was sitting up, she said, when the ambulance got here."

"But he was dead," Claire (and a number of women after her) would say, "when they got him to the hospital." That night, as she kneaded baby oil into the muscles along the length of his back, Claire paused to graze his neck with her lips, to kiss his earlobe, and to ask softly whether he intended to become an emergency-room doctor.

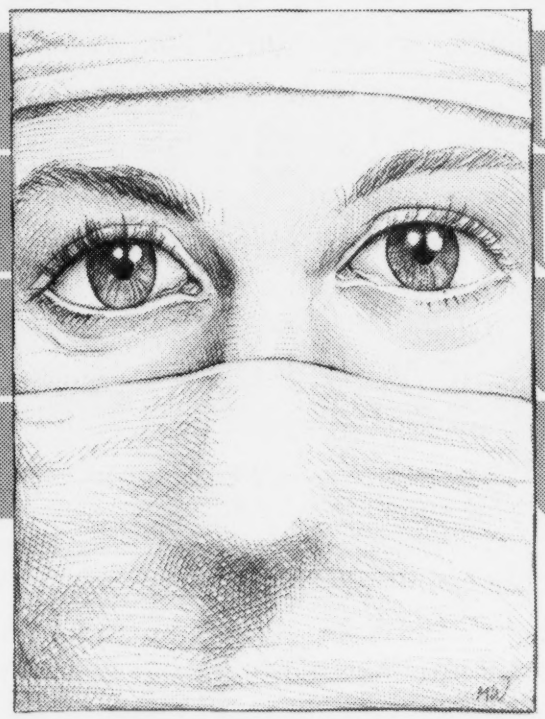
Dan Stiel outstripped the cornfields; but he carried his Iowa shyness into gross anatomy when he stammered *sternocleidomastoid* during orals. Cadavers unshrouded Dan; they dissected his fear at midnight. Divide and conquer, decided Dan, and parcelled out the body on a hundred index cards listing muscle origin, insertion, innervation, bones, their parts, and so on and on and read this deck as others do Tarot. It was "Mummy," as his group called the elderly pickled body assigned them, that could not be dealt away. He let the others take their blades and probes and forceps to her until they demanded he do his share on the chest; Dan stood over the corpse with a tin soup ladle doling out the borscht that had been her left lung thinking this/it walked and talked and laughed and cried and fucked and bore children and scolded them and one day someone gave her a yellow rose and another day she took pie next door and once someone touched this breast and the air of mountains passed through these lungs and she too may have loved poems, maybe even made them, and he learned anatomy from index cards and pictures. Dan was relieved to find himself, none too soon, safe in the year of pharmacology.



Agnes Smiley died in pathology. She died of every disease in the text — sometimes suffering from a number of them simultaneously. She felt so filled with diseases that she found it necessary to douche daily and would once a week cleanse the surface of her body with Soft Scrub, which did not cause the sort of rash she had gotten from Ajax. And she would never, ever admit to anyone that she had nearly rubbed herself raw with Comet, but only once. This was the year of the grilled cheese sandwiches, made quickly in the toaster oven: pumpernickel bread with butter and cheddar at 400 degrees for ten minutes while the can of Campbell's heated through. And a bowl of cereal sometime later in the night as a treat between closing the textbooks and opening the notebooks. "I've forgotten how to memorize," she would wail into the phone at Pat while stirring the tomato bisque. "It takes twice as long to learn."

JP Foreman found the learning fascinating, tedious, not excessively demanding and registered for an astronomy course at the local planetarium because the fee was only ten dollars; because she wanted to avoid the pre-clinical panics of classmates; because she needed something to relieve the repetition of classes, of memorizing, of the tunnel she began to feel was suffocating her. She went by herself to astronomy on Wednesday nights from seven to ten and occasionally stood outside herself observing herself observing the universe. JP was now using spiral notebooks a size larger, but jotting in them less frequently; she had begun to write letters — they required her to round out, elaborate, develop what she had taken to calling the "tunnel themes" — observations of the process of becoming a physician.

Paul Zhansky memorized as a madman; he memorized as if he might at any moment be asked to pass on verbatim to another what he knew. Once when he was driving north on 39 a mongrel part-collie trotted alongside the road looking, or so Paul thought, as if she planned to dash across. Zhansky pulled over, convinced the bitch that he was friendly, and coaxed her to accompany him to the open doors of a small three-stall barn along a cinder path some 500 feet from the highway. The young woman measuring out oats whistled for the dog; the young woman was called Cindy, she smelled of hay and sweat, and thought Paul had incredibly blue eyes, and would he like a root beer as her chores were done and she had no riding pupils until much later in the afternoon. Zhansky felt safe away from the memorizing. He thought he was about as ready as he would be for Boards Part I.



When he learned he passed Part I, D. Stiel wrote:

On this twilight of madness at last alone
I reconcile myself to what was lost . . .
and find nothing
An unimpeachable void with some ashes not yet cold,
a trace of smoke curling away like rumpled red hair.
I close the door and turn down the hall
catching an older face from the wall
in awkward ceramic reflections.

When she was informed that she had failed Boards Part I, A. Smiley:

Telephoned Alan to say they would not be seeing each other for a while,
Allowed herself only one day to clean her one-bedroom apartment,
Would not let Pat, or anyone, hold her while she cried,
Began that very evening to review for the repeat exam in three months.

JP Foreman passed and wrote out her happiness in splendid detail to Alice and then spoke seriously to her cat: "Cleo, would you mind very much if Gerry were to move in here with us?"

P. Zhansky bought a bottle of deep red burgundy, and brought it to the house behind the barn along the cinder path to celebrate with Cindy who found his usually taciturn mood so jovial, so relaxed, that she was not at all afraid to tell him they were pregnant.

Rotations. Like a Ferris wheel. But the music and the lights play around the clock — the music and the lights, they never stop. Stiel, and Smiley, and Foreman, and Zhansky all ate at the smorgasbord of medicine: clerkships, rotations, round and round to the never-ending tune of a pitiless calliope on the merry-go-round of specialties two weeks at a time — pediatrics, Ob-Gyn, oncology, plastics, medicine, internal, external, ENT, psychiatry: pick what kind of doc you're going to be.

"My God, these people are really sick."

"It's two a.m., are you coming to bed? You've been up since five."

"In a few minutes. I have to write this H&P."

"Student on call — start IVs."

On rounds (and rounds and rounds and rounds) — humiliation: "Mr. Stiel, what might be the cause of this lady's sepsis?"

Hurry up and wait: We'll begin rounds as soon as the Attending's out of conference.

The year they moved into green pajamas.

The year they learned to hold retractors.

The year they forgot how to make love.

New words: *Management, compliance, surgical defect* (that's a fuckin' bloody hole in the guy's face where his cancer used to be).

"Who's following this patient."

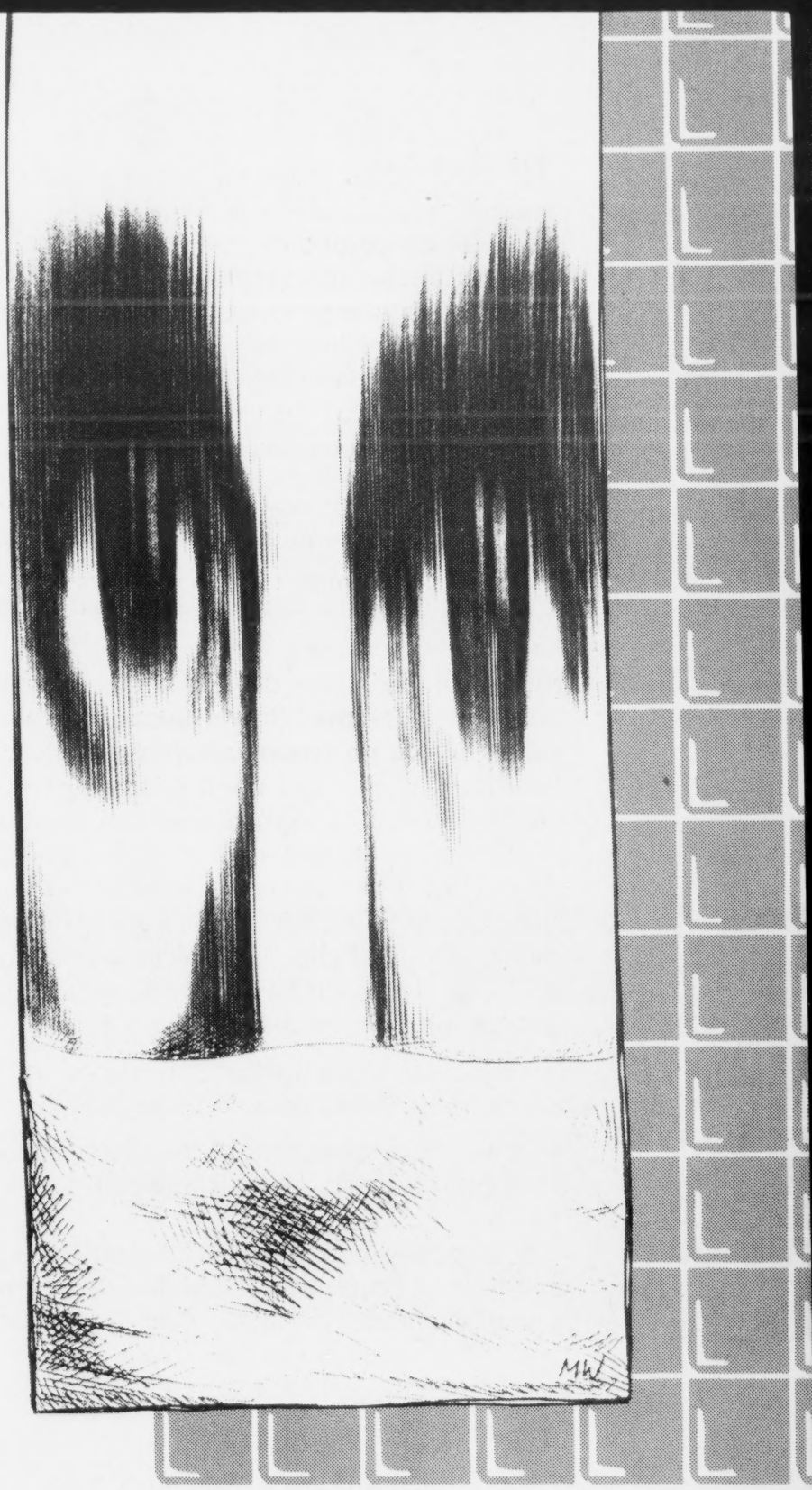
Be here, there, everywhere.

"JP Foreman, you are late."

"I stopped to change my Tampax."

"Honey, you're home! Little Paul wants to see his daddy."

"Just let me sleep."



And then:
"IN THE ORDER OF HIPPOCRATES YOU ARE A PRIEST FOREVER."

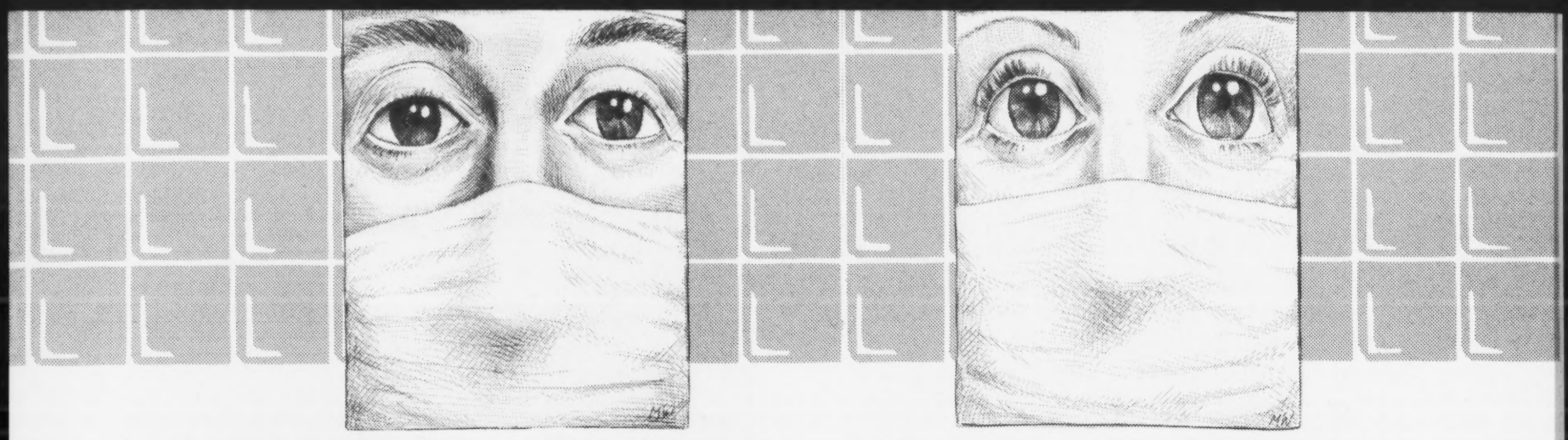
"This is not as I thought it would be."

Dr. Stiel looked for the verses he had hidden from himself and only silence echoed, echoed, echoed along ceramic corridors within.

"They gave me these letters after my name and only I and others in the brotherhood know I am totally unqualified to do anything. If I found a woman bleeding on the side of the road, I'd be more helpless than the next guy. He'd have the common sense to call an ambulance — I'd freeze thinking I should know what to do. Some hoax is being perpetrated. The king has no clothes." This would be the summer of the whiskey sours.

Dr. Foreman declined the invitation to graduation. She chose to spend the afternoon talking with a young attorney who was associated with Amnesty International about a theory she had threshed from the tunnel: that torture, political torture, was less an ideological weapon than a form of sexual aggression. They were drawing parallels with what little had been studied of rape.

Cindy prepared dinner for Dr. Zhansky and his parents, during which young Paul disgraced himself by flinging mashed potatoes at the newly minted physician. "I'm proud of you, son," his father was not accustomed to emotional displays. "If only your brother were here to see you now," Dr. Zhansky's mother added.



Dr. Stiel took to learning words; he delighted in the words: he would taste the words, rolling them round and out loud, then call them back and swallow them. The words nourished him. He dug out their Greek roots and powdered them to poultices.

"Hello, I'm Dr. Stiel," he would greet his patients. And he would nod thoughtfully at their flow of guilt and grief, appearing to concentrate, sketching Pythagorean combinations on his large white pad; then he would embellish the one word he had chosen to write with calligraphy that might have made a medieval monk jealous. Dr. Stiel chose the words carefully, assigning them with Swiss precision: schizophrenia, phobia, oedipal, mania.

But the clock in the locked universe on the second floor didn't keep accurate time.

And no verses sprang to fill the empty spaces between geometries on his white pad.

"Dr. Stiel, you have diagnostic talent," his attending would comment. "Your detached rapport is commendable," he would note the following year. "You seem able to draw from people secrets they wouldn't tell themselves."

"There's a staff position opening about the time you finish residency. I'd like you to consider it," his chairman said. "I'd like to have you aboard."

"Randy, you've been coming to see me for three months now. You think the medication I prescribed has done the trick?"

"It's great stuff, doc. I sleep better now. My sales are up. I don't spring out of bed in the morning like I'd like to, but I don't lay there all day like I used to, either."

"Well, Randy. In my opinion, you'd get some of the spring you want if you found some interests, some activities that had nothing to do with the hardware business. Something you enjoy..."

"My wife's been saying the same thing. I'll have to give it some thought. What are your hobbies, doc?"

Dr. Smiley would later call it the season of scotch on the rocks. She never saw the sun rise or set through the windows of the northeast corner efficiency on the seventh floor.

Pat, climbing on schedule up the cosmetic corporate ladder, now lived in the city and sometimes would be waiting in Aggie's apartment with breast of chicken in philo leaves from the deli down the street staying warm in the oven, salad crisp, mushroom sauce waiting to be heated, John Denver soothing on the stereo: "You take such good care of me, Pat." Dr. Smiley would say as she covered the ice cubes with Scotch the few nights of the month she wasn't on call. "How was today?" Pat put her briefcase away. "Oh, Pat! They're dirt bags! Scum buckets. They don't speak English, they don't wash. And I'm supposed to shove barium up those filthy assholes day after day. We got a slob this evening — it took two orderlies to lift the pig onto the table — and half his hams still hung over on either side. And later, they wheeled in this little old thing labeled an 'emergency' — she must have been 102 years old and weighed less than her age. I prayed when I let in the barium. Prayed that she wouldn't explode right there on the table. What kind of jerk would order the damn test! So what if they find polyps or Ca — what are they going to do? They can't operate — one whiff of general, and she'd be out forever. They're just going to toss her, pains and all, back to the nursing home and up her Demerol." By now, Pat had served supper. "God, this gravy's good," Dr. Smiley said in the same hysterical tone. Has her voice always been this shrill, Pat wondered, and tried to cover her thoughts with a joke. "And here I thought you picked radiology for the stable hours, home and family, and sewing kitchen curtains. Have you and Richard set a date yet?" "Oh, maybe in a couple . . . Pat! What's with the cake and candles? Oh my God! Your thirtieth. I didn't even get you a card. Oh Jesus. I'm so sorry. Pat, I don't even know what day it is anymore. I forgot." Aggie collapsed in tears. "God, I'm sorry," before the little French torte with three small candles fluttering atop it.

JP wrote weekly to Gerry, who had won a Rhodes and was pursuing history in Oxford for two years:

I like Ob-Gyn. I like using my hands.

The Medical Center here feels like *real* medicine (I sigh), clean and efficient. The moneyed atmosphere of multiple beeping machines and efficient paging systems. Sometimes I feel like a living, breathing, beeping IVAC machine, my white coat cackling with metal instruments, feeling important as I hear my name called on the overhead page. Here's a new thought I'm trying to develop: the yin-yang concept of the patient-doctor. Doctors are supposed to be perfect and patients by definition are imperfect. I see this polarization in medicine, which is artificial, of course. The perfect doctor fascinated by the imperfections of the body or mind — motivated by the desire to eradicate imperfections (disease, death, insanity) and yet fascinated by these Picasso variations of Michaelangelo's David. What drives the doctor? Perhaps the desire to purge the patient from inside of himself. For we are all both patients and doctors with our frailties and our expertise.

Sometimes I wonder about the patient in myself and my own motivations, for selecting Ob-gyn, for example. It occurs to me that of all the specialties, no matter what reasons I give for selecting this one, the truth may well be that this choice is based on some subconscious need to touch my own womanhood, my femaleness. After all, most of my life has been spent in male-dominated interests and professions. There was an interesting commentary in *JAMA* likening the abuse of medical students to child abuse (the abused child grows up and abuses her child). I really see this around me — chief residents scorning residents scorning interns scorning third-year students as though they have forgotten their own experiences of a few years past. It's very strange. I hope I can avoid perpetuating it.

Don't spend time missing me — my hours are around the clock, so even if you were here, we wouldn't see each other for two years.

DURING THE YEARS of his general surgery residency, Dr. Zhansky fathered two more children by Cindy. One was born sometime in the spring. The birthday of the second, a little girl, June 17, he would remember. Often. He was chief resident.

The week of June 17, the American College of Surgeons meeting, all the attendings attending. Himself attending Marian, in for the fourth and final time. "You can handle it, Paul." Dr. Fables' beefy hand that he had seen up to its elbow in intestines reaching for a cystic ovary, Dr. Fables' beefy hand on his shoulder farewell, "You can handle it." June 17 scraping the tumor from her skull

scraping deeper, the skull chewed through
brittle — spongy
both — like a slush of leaves frozen on
the surface of a pond —
suction scrape suction scrape Marian was
18 years old suction scrape
she had noticed an
irritating little mole at the back of her head
suction scrape
it kept irritating her suction
then a patch of hair fell away
suction scrape.
Dr. Fables biopsied the spot
then large as a quarter
scrape scrape Melanoma —
the fucking wildfire variety
suction scrape dammit every few months
she came in
to have the vagrant cells suctioned
scraped suction
eating downward through bone

Suction. Gently gently suction. No more skin, no more bone, the little hairs of red are capillaries of the dura, dura mater, and beneath cobwebs of arachnoid, and beneath pia mater, thin thin pia, pia mater sheltering the occipital lobe of Marian's young brain. "That's it. We're down to dura." Dura mater. Mater-mother. Mother — brother. Dead dura. Those vagrant bastard cells would turn sparkling eyes, intelligence and hope to cream of cauliflower soup inside a month. "That's it." She would die, her brains dripping out.

"Do you believe in God, Doreen?" to the nurse who stood across the skull.

"Only when I see a full moon rising in October and need to say Thank You."

"How about miracles?"

"Every day."

"That's it." Sterile gauze taped in place. Wrapping three-inch Kling 'round and 'round and 'round the skull. "That's it."

"As soon as I'm done dictating this op, I want to hear about miracles, Doreen." ■

Premenstrual Syndrome

From my personal journal:

"6/25/79: Torrential downpour of my soul: Paranoia, depression. Yuck. It will pass.

"7/4/79: And the depression has passed. The fog lifted with the flow of my bloods."

For about six years I have experienced a cyclical depression that I always described as a fog, a web in my head that dispersed with the heaviest flow of my period.

Although the depression was the most difficult to deal with I experienced other discomforts at the same time. These included tension, irritability, lethargy, a five- to ten-pound weight gain, headaches, and confusion. I have experienced some or all of these at approximately the same time each month for the last six years, that is five to fourteen days before my period. My menstrual flow, though uncomfortable from cramping, relieves these other discomforts.

For two to three years of the six I thought of myself as crazy until I linked the flow of my blood with relief. A monthly calendar kept for a year revealed a pattern. Then a passage in ***Our Bodies, Ourselves*** *(**NWEC** p. 344) described my condition clearly.*

That information began to change my perspective; maybe I wasn't just a plain basket case. Maybe I had a physiological imbalance. Maybe there was help.

I have learned there is help, indeed; help through education, nutrition and other self-aids, hormonal therapy, and a growing nexus of women who are battling the same problem, premenstrual syndrome (PMS).

Part of the nexus is PMS Action, a nonprofit corporation, run predominantly by previous PMS sufferers. Serving as an information center, PMS Action provides books, tape cassettes, pamphlets, local and nationwide training workshops and lectures, and an informative update newsletter, the ***PMS Connection****. Personal telephone consultations, based on a family income fee scale, are offered for those with more specific or personal questions.*

Once a Month*, by Dr. Katharina Dalton, is a nontechnical book describing specific menstrual problems such as dysmenorrhea (painful periods), endometriosis, menopause. Premenstrual syndrome is described and distinguished from these menstrual problems.* ***Once a Month*** *tackles the major symptoms of PMS, one by one, describes the self-diagnostic tool of a monthly PMS calendar, and discusses progesterone therapy. Dalton has pioneered the recognition of PMS and its treatment with progesterone therapy. Dalton's stories and quotes from PMS sufferers coupled with her clear information offer the PMS sufferer comfort, reassurance, and concrete help.*

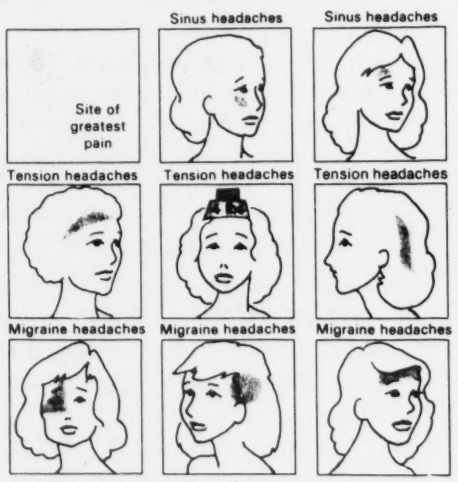
While ***Once a Month*** *concentrates primarily on a hormonal imbalance and progesterone therapy,* ***PMS and You*** *emphasizes a more wholistic approach. Covered is a brief history of PMS research, its social implications, what it is, what to expect from your doctor, warnings of inappropriate care, progesterone therapy and other treatments. But a large chapter of the book is devoted to a well-explained and -illustrated self-help natural approach. Included is a "PMS Recovery Diet Plan," a well illustrated PMS workout, a list of minerals and vitamins which can decrease the severity of PMS symptoms, and guidelines for stress reduction through meditation and relaxation technique.* —*Ginny Masullo*

•

After noticing the absence of her menstrual migraines during the last two trimesters of her first pregnancy, Dr. Dalton and another physician reasoned that perhaps the massive amounts of progesterone produced by the placenta during pregnancy were connected to the relief from the migraines. Dr. Dalton was her own first patient on progesterone after her pregnancy. She gave herself daily injections of progesterone and experienced relief from her menstrual migraines, just as she had during her pregnancy.

Dr. Dalton's interest in progesterone therapy was stimulated further when she was called to an emergency where a woman was having a serious asthmatic attack requiring hospitalization. The woman's husband remarked to Dr. Dalton, "She has one of these every month except when she's pregnant." This woman was also successfully treated with progesterone. . . .

—*The PMS Connection*



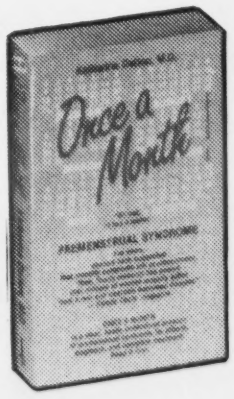
Sites of greatest pain in menstrual headaches
—***Once a Month***

•

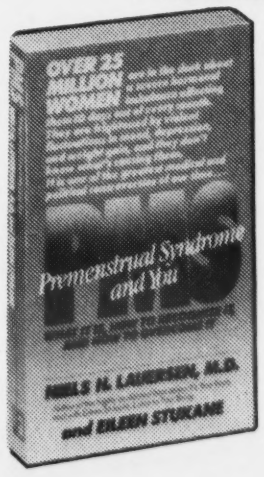
Many women with PMS say that they become obsessed with food cravings during their premenstruum. Women desire salty foods, sugars, or starches; they have one or a combination of cravings. "The Natural Approach to PMS Relief" aims to curb food cravings through nutritional techniques and vitamin and mineral supplementation. Alterations in diet also help to reduce fluid retention and psychological symptoms, since the release of the brain's hormones and neurotransmitters seems to be influenced by vitamin and mineral levels.

—*Premenstrual Syndrome and You*

The PMS Connection
Treacy Colbert, Editor
$3.00/year (2 issues)
from:
PMS Action
P.O. Box 19669
Irvine, CA 92713



Once a Month
Katharina Dalton, M.D.
1983; 247 pp.
$8.45 postpaid from:
Hunter House Publishers
P.O. Box 1302
Claremont, CA 91711
or Whole Earth Access



Premenstrual Syndrome and You
(Next Month Can Be Different)
Neils H. Lauersen, M.D. and Eileen Stukane
1983; 224 pp.
$9.95 postpaid from:
Simon and Schuster
Attn.: Mail Order
1230 Avenue of the Americas
New York, NY 10020
or Whole Earth Access

The Alternative Health Guide

There has been a proliferation of books written on alternative therapies in the past few years and I thought, who needs another one? I was, however, impressed with ***The Alternative Health Guide****. Originally published in England, this book is well organized, well researched, and sensible, and doesn't proselytize. The first section presents the many different types of therapies (from astrology to yoga), their histories, theories and practices. The second part focuses on certain disorders (allergy, cancer, mental illness, etc.) and how they can be treated by nontraditional medicine. This section is well considered and offers sensible information for those seeking a different approach to health care. There is also a resource list of practitioners and organizations in both the United States and England.*

This is a good book for the skeptic who wants an overview of an often-confusing subject.

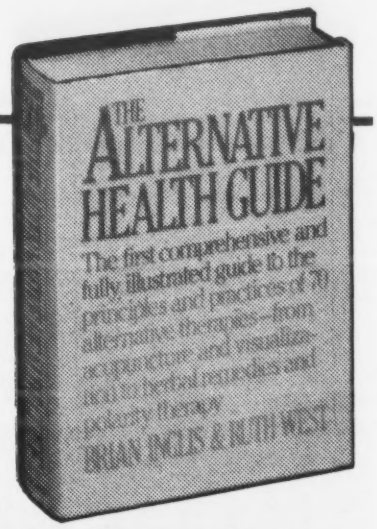
—Rochelle Perrine Schmalz
Planetree Health Resource Center

•

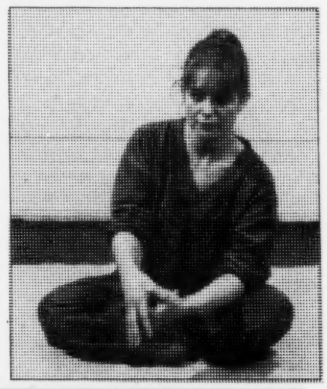
Shiatsu is a Japanese word meaning "finger pressure." It was originally the Japanese form of Chinese acupressure, but like so many eastern therapies, it has developed characteristics of its own. Today in the hands of many of its practitioners, the technique has absorbed elements from both *Massage* and *Touch for Health* (see pages 95 to 100 and 116 to 118). The traffic has not been all one-way, however, and several therapies, including these, have themselves adopted aspects of shiatsu.

Like *Acupuncture* (see pages 120 to 133), shiatsu is based on promoting health by stimulating *chi* (*ki* in Japanese) energy, using pressure on the skin at various points along meridians associated with the function of vital organs.

The Alternative Health Guide
Brian Inglis
and Ruth West
1983; 352 pp.
$20.95
postpaid from:
Alfred A. Knopf, Inc.
400 Hahn Road
Westminster, MD 21157



Acupressure is like acupuncture without needles. It is essentially a self-help technique in which the fingers are used to apply pressure to points known to be helpful for relief of various types of pain. In its western form, where it is sometimes known as G-Jo, acupressure has largely been overtaken by shiatsu. Although practitioners may insist that acupressure rates as a separate therapy from shiatsu, the differences in practice are hardly sufficient to justify making any distinction between the two.



Pain Relief

Squeezing hard on the web of flesh between the thumb and forefinger relieves many kinds of pain — from toothache or headache to constipation and period pains.

Women's Health Care

This is an unusual book that examines a wide variety of alternatives in the treatment of women's health problems.

For instance, the treatment of chronic irregularity of the menstrual cycle is discussed by an expert in Chinese medicine, a well-known herbalist, a homeopath, an acupuncturist, a yoga teacher, and a pioneer in biofeedback research. Each has a different approach to treating the disorder. The latest research and controversies regarding hormone therapy, caesarian surgery, and contraception are also examined.

The emphasis is on self-help, and most of the treatments are either do-it-yourself or easily obtained. An added value of the book is that it gives us a clearer understanding of wholistic medicine: as the treatment of the whole person, drawing on the wisdom of cultures all over the world.

—Rosemary Menninger

•

Most "women's problems" brought to health care professionals are most likely to be distortions of inner, self-regulating, and homeostatic body systems rather than diseases wrought by outside attackers. Hence, orthodox "treatment" approaches to them are rarely successful. Life style issues such as attitudes, stresses, nutrition, exercise, and environmental exposure are more likely to surface the "causes" of these problems.

Hence, women have been given short shrift by orthodox medicine because their approach to the world, and their problems, involve a different world view from traditional Western science. Newer, holistic, and educational approaches may prove both more comfortable and more productive for women's health issues.

•

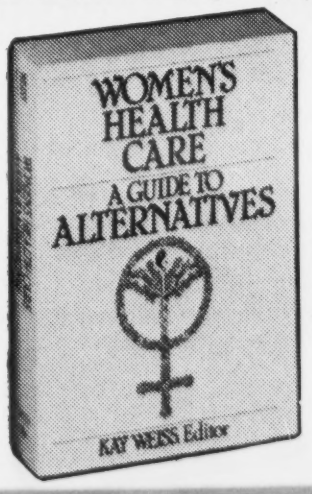
MENSTRUAL REGULATION FORMULATIONS

It has long been known that there are naturally occurring estrogens in plant foodstuffs (Verdeal and Ryan 1979), as well as in certain medicinal herbs. Licorice root and Angelica have been carefully examined and found to be characterized by considerable amounts of estrogens (Goryachev, Pauzner, and Muinova 1970; Tuskaev 1971). In addition, Licorice root when given in large amounts has caused premature sex maturation in young animals (Murav'ev and Kononikhina 1972). Some herbalists use Licorice and Red Clover* for their plant estrogens in the estrogen phase of the menstrual cycle (Madoyan et al. 1973) and then Sarsaparilla and Blessed Thistle in the progesterone phase, these latter two because of their plant progesterone content. *Agnus Castus* is also taken because it is thought to exert a beneficial effect on the pituitary to create a balancing effect on hormone production. The table below gives recipes for estrogen and progesterone tea. The tea is made in the standard way: 1 oz. of the dried mixed herbs is steeped (infused) in 1 quart of water, kept just under a boil, for at least 20 minutes. The tea is strained and the liquid drunk, 6 oz. four times per day, during the days indicated.

Herbal tea recipes

Estrogen Tea — take from Day 1-10	*Progesterone Tea — take from Day 10-27*
Licorice root — 1 part	*Sarsaparilla — 4 parts*
Angelica root — 1 part	*Blessed Thistle — 2 parts*
Peony root — 1 part	*Raspberry leaf — 4 parts*
Agnus Castus — 1 part	*Ginseng — 1 part*
Red Clover — 1 part	*Agnus Castus — 1 part*

*Note: Red Clover has been shown to induce sterility when eaten in large amounts by forage animals. In smaller amounts it stimulates reproductive function because of its estrogenic content.



Women's Health Care
(A Guide to Alternatives)
Kay Weiss, Editor
1984; 444 pp.
$16.20
postpaid from:
Prentice-Hall
P.O. Box 500
Englewood Cliffs,
NJ 07632
or Whole Earth Access

Meetings With Remarkable Cat Ladies

Illustrated by R. Crumb

BY
DIANE CALLUM

Gerty. At the bank on Main Street, the time/temperature sign had just lit up 108° F. You could literally fry an egg on the sidewalk in this Sacramento Valley farming community of 2,700 people (most of whom were languishing in their air-conditioned houses or were submerged up to their ears in the creek that borders the south edge of town). The infernally hot, dry, north wind brought no relief — just more dust and a putrid smell: the stench of Gerty's grotto.

Gerty's grotto: overgrown with grass and weeds . . . littered with empty tuna cans, milk cartons, and assorted plastic artifacts of our throwaway culture . . . with an enormous dropcloth spread out in front of an antiquated, overstuffed armchair and a wooden box encrusted with wax drippings and candles. *This* front yard stood out from the rest of the carefully manicured, middle-class lawns on the block like an antediluvian nest, or a shrine — the sanctuary of the patron saint of cats.

Gerty herself was asleep in the corner of her yard. Her great weathered feet sprawled out onto the sidewalk, as her leathery jowls jiggled with each bosom-heaving snore, and seventeen

Diane Callum edits ***Winds of Change,*** *the alternative newspaper of Yolo County, California. Robert Crumb is the paper's resident cartoonist; his covers and comic work for* ***Winds of Change*** *were featured in the Summer 1982* ***CQ****.* *—Jay Kinney*

cats of assorted color and pedigree, like a Greek chorus, slept and snored in symbiotic union with her . . .

Gerty is my nemesis, my alter-ego. She disturbs my being and plays havoc with my sense of order. She broods her way into my thoughts, burrowing into my cortex like a hungry tick, to suck away at any feelings of female complacency. I am obsessed with this 84-year-old woman who sits, day after day, proud, educated (a retired accountant) and articulate (she writes poetry), in a heap of trash, surrounded by felines. Gerty, "The Cat Lady," is a caricature of myself, the fear of what I, too, might become.

At any moment, order can become aberration, "a violent disorder," as Wallace Stevens called it. There is no clear line of demarcation, no warning "click" of recognition, as ritual housekeeping becomes compulsive cleanliness, or collecting degenerates into accumulative hoarding. Talking with Gerty, I realize that the progression from normalcy to madness is a continuum adorned with familiar female symbols — the shopping bags, the cats, the caretaking and housecleaning. Gerty's accumulated possessions have forced her out of the house she owns; the fact that these possessions, these "treasures," are plastic is irrelevant to the issue of a human tendency gone berserk. There is a bit of The Cat Lady in all of us.

Mamie. I met Mamie in the '60s. Her section of Brooklyn Heights was the depths of Hicks Street — the end of the block, with its dilapidated buildings and vacant lots. But her true domain was the world of cats: tomcats, alley cats, the one-eyed and the wounded. In fact, the derelicts seemed to be her specialty. Wherever Mamie went, I used to see a parade of battle-hardened, scarred felines, tails raised in salute to their provider of nourishment, trotting along behind. She was Mother Courage to this beggar's opera of cats. In her perennial black coat and house slippers, and with her Brooklyn accent, she had all the makings of a Brechtian hero. But her only manifesto was cats. People seemed to be an embarrassment of sorts to Mamie, who merely *endured* the two-legged creatures.

My husband and I were among the bipeds that Mamie endured — probably because we had a pet of our own: a dog named Charlie. Mamie's apartment window opened onto the roof of our shed where Charlie romped. In an attempt to endear herself (and her kitties) to us, Mamie would throw down canine morsels — oozing veal bones, hunks of chicken, and other goodies that landed with a thud and a SPLAT! For Charlie, this was ample proof of a benign Being above; for us, however, these gifts were only a source of consternation and grief. A typical dialogue between Mamie and me would go like this:

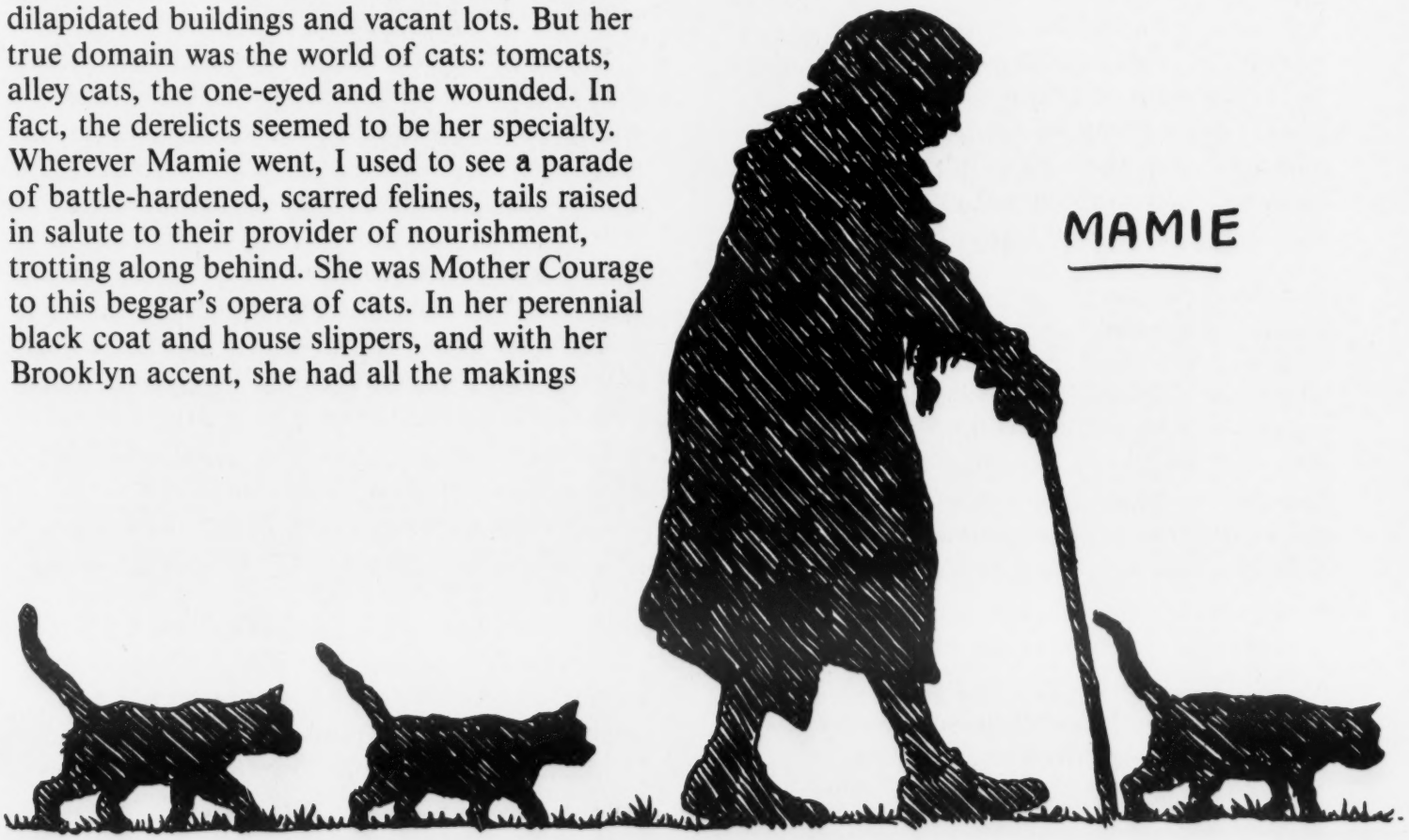
"Mamie, that ham hock nearly scared us to death! And look at all the flies out here!"

"Dat's good food."

"I know, Mamie. But it spoils in summer. Besides, Charlie gets frightened and sick."

"Dat's because ya don't talk ta him. Ya gotta talk ta him. Feed him nice, poor ting. He's hungry. I'm gonna make him sump'n real good. He like stew?"

It was an impasse for us. Mamie continued to leave cans of food all around our yard for her cats, and although she'd clean up the containers later, there would still be flies and napping cats lounging around all day. Mamie tried to make



us feel sorry for her motley crew, but we were not moved by her woeful tales of abandoned, helpless cats — especially after Charlie caught the mange from those provocative beauties.

Finally, Mamie realized we were not going to tolerate her making our yard into a sanitarium for strays. So she tried the silent treatment on us, reserving the evil eye for my husband, whom (I only later learned) she had observed kicking her favorite tomcat through the front gate. She continued to throw stuff down for Charlie (perhaps hoping to give him a concussion), but she no longer tried to engage us in conversation. At last, I couldn't stand the silence anymore, and I asked her why she wasn't talking to us. What had we done to offend her so deeply?

"I'm treatin' ya da same way yur husband treats my cats."

Thelma. Thelma lived on the first floor of a building she owned in Berkeley, near the university. A once-proud wooden Victorian with stately staircases, stained glass windows, turrets and gingerbread trim, the building's condition and reputation had been eroded by the constant influx of cats into Thelma's apartment — "The Tiger's Cage," as an asthmatic resident of the building dubbed it, resorting to a face mask as he passed her rooms on his way in and out of the house.

But Thelma was the neighborhood oracle on cats, and her salon was the place to go if you needed a pet (free-of-charge, of course). Thelma's kindness and devotion to her cats' welfare reduced her to a thinly-disguised skeleton, while her brood grew sleek and healthy. As Thelma worried and fretted over the kitties, her kindly neighbors worried and fretted about her, for like some deranged Florence Nightingale, she would often go looking for strays in condemned buildings, or in the dead of night — on some of these forays she was reported to be stark naked!

The movement to have Thelma clean up her apartment and reduce her brood of cats was short-lived. Thelma's satisfied cat customers far outnumbered those offended by her aberrant ways and cat-infested rooms. One look into those green eyes of hers as she held a purring kitten she'd nursed back to health was enough to make you shudder with the recognition of her feline affinity — in truth, Thelma belonged more to the world of those furry creatures than to the human realm.

Living with no visible means of support, often homeless themselves, these cat ladies manage to maintain and shelter a menagerie of strays for miles around. ("They look at me so beseechingly," says Gerty.) Either emaciated-looking, or with the rotund figure of the protein-poor, dishevelled and carelessly dressed, they manifest, like their first cousins the bag ladies, not the slightest appearance of female vanity. Yet, in some profound way, they represent something intrinsically female — as if their feline association bestows upon them an archetypal femaleness which idioms of our language, like "cattiness," perpetuate. The challenge to traditional femininity and the total disregard for social amenities of these women often polarize community opinion. Cat ladies are, inevitably, indicators of community tolerance.

"Some call me witch/And some call me bitch," says Gerty in one of her poems. Despite her eccentricity, she harbors no illusions about her neighbors' opinions of her. "You should write a story about Gerty," the mayor once told me. "She's got all her marbles." Yet day after day, season after season, Gerty sleeps, eats, dreams, and reads her morning newspaper in the front yard of the house she owns but doesn't enter. (Rumor has it that the house is piled so high with Gerty's possessions, she is afraid to go in lest she be killed by a falling object.) During the winter rains, she draws her plastic cover and cocoon of shawls over herself and her cats, emerging when the weather clears to dry off and "put things in order." If it weren't for the fact that she is majestically sitting in a pile of trash, she could be any grandmother, waving to passers-by and arranging her possessions. But this 84-year-old is The Cat Lady: "I know people call me The Cat Lady. I don't mind. At least cats you can trust." ■

Clean Your House & Everything In It

Clean Your House & Everything In It *has to be the bargain of the century. This paperback book includes specific "recipes" for cleaning which work and are all the more remarkable because these women are crusading against cleaning aids which are ineffective, expensive, or harmful. After two delightful months with this manual in my tote, which contains less than ten items (total cost under $20), I find that I have not only saved money, eliminated shelves full of products which are inefficient at best, reduced my cleaning time at least by half, but I enjoy cleaning because the results are so satisfying.*

This would be a worthwhile reference for three times the price simply as a resource for the myriad of cleaning problems around the house — many of which one may encounter infrequently. However, it is the list of cleaning aids themselves which is intriguing. Most of the cleaners recommended are already on our shelves or in the kitchen — old-timers like vinegar, rubbing alcohol, bleach, etc. . . . but how about cream of tartar, club soda, yogurt, and hair spray?

Two brief examples: a shower door coated with hard-water stains. Past experience — at least eight different products, each more caustic than the last, combined with much effort yield "somewhat" cleaner door. Last week, less than two minutes with lemon oil on rag: gleaming door! Son's brand-new beige jacket is covered with globs of green ball-point ink. Check "clean" — spray with cheap hairspray: not a hint of ink or damage to the jacket.

The only people that will not appreciate this book are the manufacturers of the endless cleaning products and their advertising agencies. —*Venice Kratzer*

•

STAINS AND SPILLS
A prewash laundry soil-and-stain remover such as Spray 'n Wash makes a good spot remover for some spills. So does shaving cream. Spray or squirt it on, work it into the spill, rinse with vinegar and water and wipe dry.

A cheaper spot remover is a mixture of 1 teaspoon white vinegar in 1 quart of warm water. This works well on butter, coffee, gravy, and chocolate that is spilled on either carpet or upholstery. Sponge up as much of the liquid as possible, or if the spill is solid, scrape it off the surface or the material. Then dampen the rag with the vinegar-and-water solution and scrub the spot. Let the surface dry. Repeat if necessary, and finish by vacuuming over the area.

•

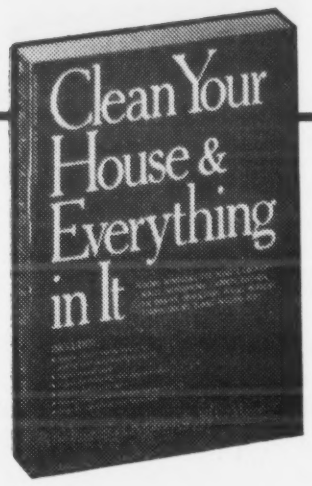
BASIC CLEANER
I don't like to use commercial window cleaners. They are too expensive for the job when cheap rubbing alcohol and water will clean as well or better than most brands. Use 2 tablespoons of rubbing alcohol to 2 quarts of water. This will make the windows glisten and you won't have to spend time getting out streaks as you do with some commercial window cleaners or ammonia.

In cold weather, use 2 tablespoons of cornstarch to 1 quart of warm water.

•

MILDEW
To discourage mildew growth on tile and showers, dip a rag in turpentine and rub it in the mildew areas. Do this every three months or whenever mildew starts to show.

Clean Your House & Everything In It
Eugenia Chapman
and Jill C. Major
1982; 159 pp.
$7.45
postpaid from:
Putnam Publishing Group
200 Madison Avenue
New York, NY 10016



The Damn Good Resume Guide

This useful book advocates a short, precisely tailored resume as the best aid in a job search. Yana Parker developed her resume models based on her own years working for a state employment office, her more recent experiences running a resume service, and extensive feedback from employers. It's all summed up here in 60 highly readable pages which include 14 sample resumes illustrating how different individuals with varied skills put their best feet forward.

At least one person we know got her present job by using this book. Recommended. —*Jay Kinney*

•

"HOW DO I ACCOUNT FOR THAT YEAR
WHEN I WASN'T EMPLOYED?"
Tell the truth, creatively.

BE POSITIVE; refer to what you WERE doing rather than to what you WEREN'T doing. Don't say "unemployed" because it MIGHT convey an UN-truth about you, that you aren't interested in working, when in fact we both know you WANT to work. Instead, look at what you WERE doing, allow yourself a reasonable degree of "being human," and emphasize the positive aspects of what you did that year.

EXAMPLE: Candidly from my own experience . . . in 1974 I was traveling across the country "trying to figure out what to do with the rest of my life;" coping with an unexpected traumatic illness; making some embarrassing and painful and wonderful experiments in group-living; and looking — sometimes desperately — for work that I could feel good about. I got by on unemployment for awhile, Medi-Cal for the illness, off-and-on Kelly Girl work, and loans from Mom. It was a very tough year.

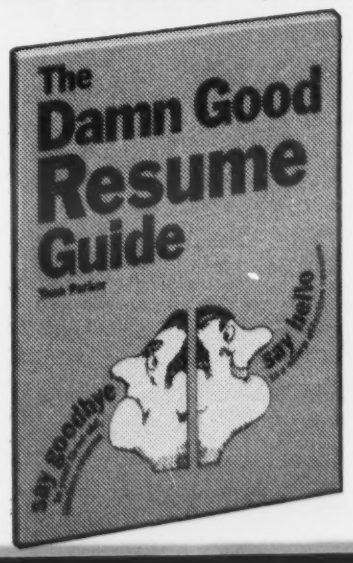
What does it say on my resume?
"1974 — Travel and independent study."

And that's true! I've just expressed it with more dignity than I was feeling at the time. I don't need to tell anybody, on my resume, what a bummer that year was. And believe me, I learned enough to justify calling it "independent study!"

•

"CAN'T I JUST SKIP THE JOB OBJECTIVE?
I DON'T WANT TO LIMIT MYSELF."
NO! Clearly stating your Objective serves to FOCUS you, not to box you in. It's critically important to KNOW WHAT YOUR OBJECTIVE IS, as explicitly as possible, and to state it, and then to have everything else on your resume directly relate to it. THAT'S what makes it a DAMN GOOD RESUME.

And remember, you could have TWO or more resumes, each with different objectives.



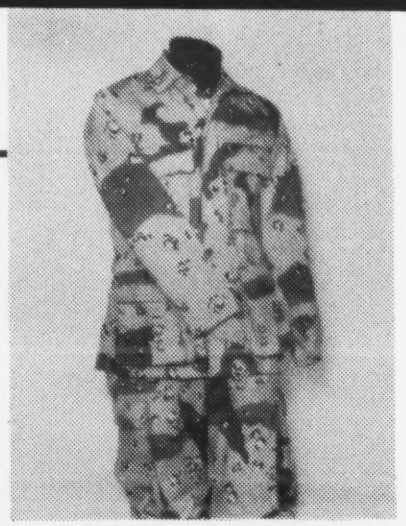
The Damn Good Resume Guide
Yana Parker
1983; 60 pp.
$5.45 postpaid from:
Ten Speed Press
P.O. Box 7123
Berkeley, CA 94707

Brigade Quartermaster

Best deal in tough interesting clothes I've seen. What were called fatigues in my day are now "Battledress Utilities" (BDU), if you please. I have to admit they're cut better, built better, and wear better than former military garb. Never mind they're temporarily chic, they're cheap, comfy, and durable. An all-black outfit I got (coat, trousers, belt, Champion knife pouch) is still dark black after six launderings. The coat and trousers, 50/50 cotton/polyester, cost $27 each. The BDUs also come in navy blue or jungle-, woodland-, or desert-flavored camouflage.

Elsewhere in the Brigade catalog are the usual T-shirts, hats, boots, some nice rappelling gear, adventurous "Survival Playing Cards" ($4.95), an interesting gasoline lantern ($62.95), knives, bags, and canes you can club muggers with. Paramilitary stuff without an ideological rap and with good service. My haberdashers these days. —*Stewart Brand*

Brigade Quartermaster
Catalog **free** from:
Brigade Quartermaster
266 Roswell Street
Marietta, GA 30060



Battledress Utilities Day/Desert

U.S. Army BDU style construction and sizing. New issue. Mil-spec 50/50 nylon/cotton twill in Day/Desert Pattern. Reinforced seat, knees, and elbows. Coat has 4 bellows pockets and button tab cuff. Trouser features 6 pockets with side gusset cargo pockets, drawstrings, waist adjusting tabs. Designed for military use and long wear. These are excellent for the southwest and dry season hunting. Sizes: XS(1), S(2), M(3), L(4), XL(5). Longs - S, M, L, in Trousers only. Avg. shipping weight: (1 lb. 11 oz. ea. piece). Military Fit. Desert BDU Coat $26.95, Desert BDU Trouser $26.95.

Partnering

Co-ownership is the sort of partnering being discussed here — a way to have the use of something that you otherwise might not be able to afford. How about an airplane or a boat? Perhaps a summer cabin or a carpool or a motorhome? Tools, computers, sports equipment, appliances are all on the list. But the potential for disaster is there too. This all too experienced book presents the joys and horrors through real examples of partnerships that worked or didn't, and how they happened.

Reading along, I could see myself easily in either situation, another way of saying that I don't know enough about such matters. The author assumes that many folks will feel that way, and she takes great pains to help prevent ill-working relationships. She gives examples of successful written agreements (the basis of good partnerships), and even offers a rather deadly test intended to keep potentially impossible partnerships from starting in the first place. It's no coincidence that the test seems like it might also be useful for preventing doomed marriages, for many partnerships are marriagelike in essential detail, and subject to the same pressures.

The book reads easily, is unusually clear, and is sufficiently comprehensive to be useful as a reference for setting up a partnership. That's enough to identify it as a "classic," and a welcome one at that. —*J. Baldwin*

•

IT IS BETTER TO GIVE . . .
Being generous counts a great deal in being a good partner—generous in your attitude toward other people. How much do you really expect from them? University of Cincinnati professor and clinical psychologist Daniel Langmeyer is often called in as a partnership consultant. His right-to-the-core-of-the-matter advice is this: "If each partner enters into the deal willing to give sixty percent and get forty, it will be a happy relationship. If one expects to give forty-eight percent and do better for himself at someone else's expense, chances are the partnership won't make it."

•

WE AND OUR RV
Since a car is sharable, wouldn't rules for joint ownership of a recreational vehicle be the same?

"Wrong," declares Tom. One of four partners of a mobile home bought in 1977 for $32,000, he says, "A recreational vehicle is not like a car. It has all the headaches of owning a home—only worse because these roll around on wheels. . . . "

In the partnership we just looked at, joint owners grew tired of the RV not only because maintenance was a problem but because the novelty wore off. They just didn't want it as much as they thought. That should serve as a warning. "Let's get it" fever can cause terrible problems later. Will you really use it enough to justify owning it? If not, pass up buying one—even a piece of one.

•

Mark feels trust is paramount among co-owners of a vacation home. Each must feel the other is doing right by all the rest. For instance, if one partner crams the disposal with artichoke leaves, he should be responsible for having the machine fixed and pay for it. He is clearly negligent. If it just stopped running, the partnership should assume the expense.

What happens if the partner who overloaded the disposal charged the expense to the partnership and just said it broke?

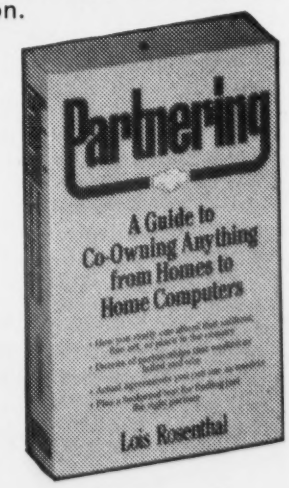
When his partner calls the same serviceman the next time because the condo dishwasher stopped running, and the repairman says, "Oh yeah, I was here the last time for the man who stuffed all the artichoke leaves down the disposal and ruined it," he's going to be upset. And lose trust.

"Disclosure is 90% of being a good partner," says Mark. "If the guy who broke the disposal told his partners what he did, they might have told him to forget about paying the bill himself. Any of them could have done the same thing. The key factor is being honest."

•

The partners I interviewed who were most successful didn't "nickel and dime" each other and their partnership to death. They felt strongly about equal responsibility, but they also had faith that the money and energy they put into the partnership evened out in the long run. It's the long run that's important. They were happy they were able to own (in common) what they now possessed. Packages of Oreos bought by one and eaten by two just weren't worthy of mention.

Partnering
(A Guide to Co-Owning Anything from Homes to Home Computers)
Lois Rosenthal
1983; 358 pp.
$12.95
postpaid from:
Writer's Digest Books
9933 Alliance Road
Cincinnati, OH 45242
or Whole Earth Access



The Washington Post National Weekly

*The **Washington Post** has long been the newspaper of record in the U.S. capitol. I've been following their section in the **Manchester Guardian Weekly** for a couple of years and have always found it to be a welcome and much-needed addition to the local dailies. After all, the machinations of the federal bureaucracy affect us all, no matter where we live. Now the **Post** has its own weekly edition — a distillation of their best features, columnists, editorials, letters, and reviews along with a liberal sprinkling of editorial cartoons culled from newspapers across the country.* —*David Burnor*

•

In the past seven years, the Education Department and state and local governments have spent about $200 million on an information-gathering system that has generated these "facts."

► More than 29,000 Indians are enrolled in vocational education courses in Virginia. (The total Indian population of the state is only 9,000, according to the state Indian Commission.)

► In New Jersey, 741,000 students took high school vocational educational courses in 1979 — a number that exceeds that state's high school enrollment by more than 50 percent.

► In some states there are large numbers of vocational education students but no teachers.

"Would I vouch for [those] data? I can't do it very easily or very readily," says Dr. Francis Corrigan, whose Education Department division is home to the Vocational Education Data System (VEDS) that produced all the numbers. "Even with a lot of qualifiers, I couldn't vouch for it."

Says an expert from the National Center for Education Statistics: "You want a number? I'll give you a number: 765. That's just as good, just as meaningful, a number as anything coming out of that system."

Eight years after Congress authorized it, VEDS has become a byword in the world of government statisticians, a prime example of the kind of data that can be generated when underfinanced bureaucrats who are legally obligated to provide detailed information to Congress must depend on recalcitrant state and local officials.

Now, although most of the system's original defenders have joined its detractors, a concerted campaign is being waged on Capitol Hill to keep VEDS alive in the face of Reagan administration efforts to kill it. . . .

The Washington Post
(National Weekly Edition)
Noel Epstein, Editor
$39/year (52 issues)
from:
National Weekly Edition
P.O. Box 37262
Washington, DC 20013

The Butter Battle Book

*Dr. Seuss is back, but his latest is not likely to charm and delight as so many of his others (43 so far) have. **The Butter Battle Book** is a troublesome and important fable for our time.*

Many of us raised, or are raising, our children with Loraxes, Sneetches, Nutches, and the like, but now it's time for the Yooks and the Zooks. The Zooks butter their bread on one side, the Yooks on the other. This seemingly simple difference in philosophy and lifestyle is enough to make them bitter enemies.

What starts with "a very rude Zook" destroying a Yook's Snick Berry Switch with a slingshot immediately escalates into a race to come up with more sophisticated weapons. The Boys in the Back Room are right there with the very latest technology of death (all done in Seuss's unique blend of rhymes and pictures). It becomes more ridiculous and terrifying with each step, until finally the Zooks and the Yooks end up face to face, each holding a Big-Boy Boomeroo, threatening to blow the other "clear to Sala-ma-goo."

Sound familiar? Well, it has to all the children I've shared it with. It's a little frightening that not one of them had the slightest difficulty recognizing what the story is really about or putting it into the context of their own lives.

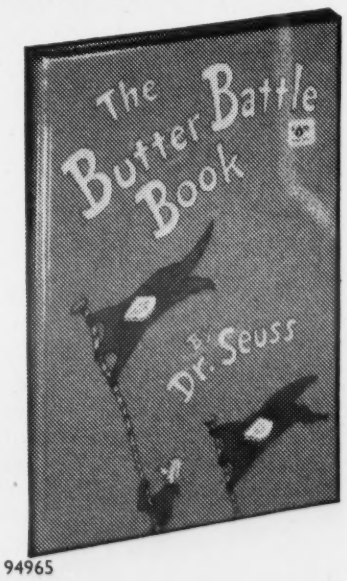
Why recommend it when the fears and nightmares are already so close to the surface? Maybe because Seuss's strange and magical creatures are so familiar and comforting to us that these new ones might give us and our children one more impetus to seek out a better solution than any we have now. After all, remember what the Grinch did for Christmas. —*Steve Sanfield*

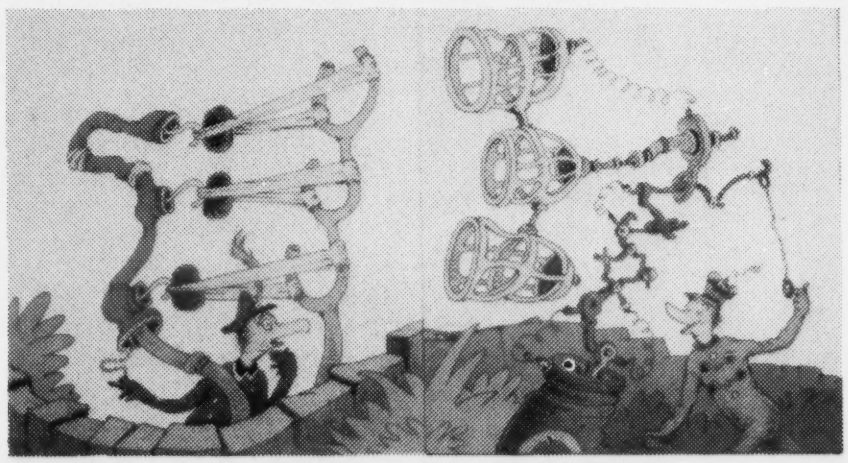
•

I'm unhappy to say
he came back the next day
in a spiffy new suit with a big new machine,
and he snarled as he said, looking frightfully mean,
"You may fling those hard rocks with your
Triple-Sling Jigger.
But I, also, now have *my* hand on a trigger!

"My wonderful weapon, the Jigger-Rock Snatchem,
will fling 'em right back just as quick as we catch 'em.
We'll have no more nonsense,
We'll take no more gupp
from you Yooks who eat bread with the butter side up!"

The Butter Battle Book
Dr. Seuss
1984; 44 pp.
$7.95 postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157
or Whole Earth Access





CRIME AND CAPI

TALISM IN CHINA

A Photo Essay by Orville Schell

Since the death of the political visionary Mao Zedong on September 9, 1976, and the rise to power of the political pragmatist Deng Xiaoping, China has undergone a political change which is in many ways as dramatic as that which brought the Communists to power in the late 1940s. Almost all the imperatives of Mao's earlier revolution have been reversed. Whereas China once dedicated itself to self-reliance and isolation on the international scene, now it eagerly seeks to build economic relations, not only with its socialist allies but with the capitalist West. Whereas it once had waged a tireless struggle against class divisions, now it looks on egalitarianism as naively utopian and as an impediment to production. And while the Chinese government and Communist Party had once viewed politics as life itself, they have now relegated politics to the back seat. China's leaders, who once sought salvation for their country through collectivizing agriculture into people's communes, and through the centralization of state-owned and -run industry, have now dismantled communally run farms, handed new autonomy to factory managers, and sanctioned the revival of private enterprise. Propaganda organs which once admonished Chinese to "Carry the Revolution Through until the End" and to "Never Forget Class Struggle" are now publicizing such new slogans as "To Get Rich Is Glorious."

Although Chinese Communist Party leaders still protest that China is a socialist and anti-imperialist country, the ethic of capitalism and the cultural values of the West have more and more come to predominate in that country, raising a whole new host of problems with which China has had little experience.

The Great Wall Hotel in Peking, a $72 million joint venture between the U.S.-based Unison Development Construction Company and the China International Travel Service *(right).*

For almost three decades, Communist China's defiant commitment to the notion of self-reliance and its hostility toward western imperialism suggested a deep-seated fear that its socialist revolution could be contaminated with bourgeois influences if its doors were ever opened to the capitalist West. But now with Deng Xiaoping's new pragmatism in command and modernization as its foremost objective, the Chinese government has aggressively started to seek out not only foreign technology but foreign investment as well. New western-style hotels under foreign management have begun opening in many of China's largest cities to cater to the needs of tourists and businessmen from abroad. They have not only created a dazzling spectacle of capitalist luxury in the midst of China, one of the poorest countries in the world, but have begun to have a profound effect on the way young Chinese view the outside world.

Bellhops at the newly opened China Hotel in Canton *(left).*

It was not too many years ago that China's youth donned red armbands and attacked everything that smacked of the "twin evils," capitalism and imperialism. Any bourgeois taint was enough to cause one to be cashiered and sent to the countryside to "learn from the workers, peasants, and soldiers." Now one of the most prestigious jobs a young Chinese can aspire to is to work in one of these ultramodern hotels reserved for the use of foreigners.

Orville Schell and China are not strangers to each other. Orville's visit to China during the period when it was relatively closed to foreigners resulted in two books: ***In the People's Republic*** *and* ***Watch Out for the Foreign Guests! China Encounters the West*** *(each $4.95 postpaid from Random House, 400 Hahn Road, Westminster, MD 21157).*

He returned to China in mid-1983 and again in January and February 1984 on assignment for the ***New Yorker****. The photos here are from the most recent trip. The first installment of Orville's report appeared in the* ***New Yorker****'s January 23 issue, minus photos, as is the* ***New Yorker****'s style. Their loss is our gain.* —*Jay Kinney*

Calligrapher writing *duilien*, or New Year's door posters, in a street market for private peddlers, Taishan County, Guangdong Province.

Once utterly devoid of all sorts of small private businesses, the streets of China's towns and cities are now crowded with peddlers and merchants who make a living completely outside the state-run economy. In many towns and cities, stores which were once state-run have now been leased out to private businessmen as part of the government's new effort to increase economic initiative and solve the serious unemployment problems.

Private vegetable peddler, Taishan County *(below).*

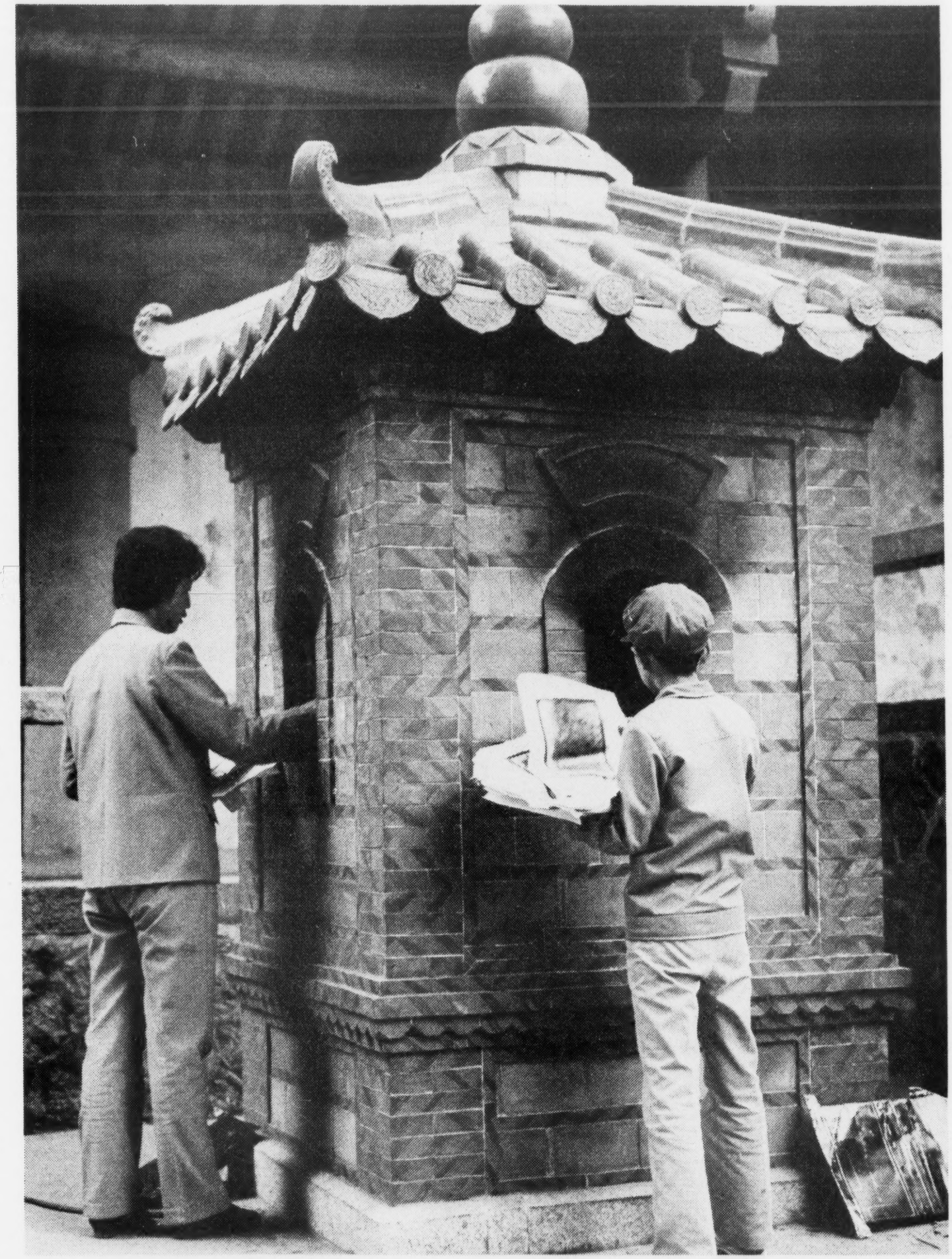
With the dismantling of the communes and collective agriculture — which had been the keystone of Maoist agricultural policy — land has been redivided and leased back to individual peasant households for private cultivation. Under this new "responsibility system," peasants are permitted to grow what they wish (after meeting certain government-prescribed grain quotas), and to market it as they please. Many hire privately owned and operated transports to bring their produce into towns and cities where it can be sold at a premium at free markets.

Many peasants — called "Ten thousand *yuan* households" by the government, which has made models of them — have gained considerable wealth, enabling them to buy appliances, trucks, and even cars of their own, or to build expensive new houses. Other peasants, who have not been able to stand the competition, have fared less well, and threaten to become a new underclass as Chinese society once again delaminates into rich and poor.

Private peddler selling snakes for food, Taishan County.

In South China people eat a great variety of wild animals, including snakes, lizards, monkeys, frogs, owls, hawks, and wild cats. Many of these animals are important predators against rodents and insects. But under the "responsibility system," there are few controls against trapping and selling them in what is a highly lucrative business — an owl brings about $15 U.S., a hawk $10, a large snake $7, and a monkey up to $75.

As a result, the depletion of these species of wild animals is proceeding at an alarming rate, as are many other kinds of environmental degradation caused by people who do not own their land but are out to make as much short-term profit off of it as possible. Overgrazing, reckless cutting of trees and overreliance on chemical fertilizers are three areas which Chinese officials must begin to address if China's environmental situation in the countryside is to be improved.



Devout Buddhists worshipping and burning "gold paper," or fake money, to appease the gods at Nan Pu To Temple, Xiamen, Fujian Province.

As part of its liberalization program, China has begun to allow greater religious freedom. Churches, temples, and mosques all across China have been restored and reopened. But there have been negative effects of this policy. For instance, many traditional superstitious practices once associated with peasant cults have also begun to resurface in the countryside. Increasing stories of bizarre sacrifices to local deities, exorcisms by sorcerers, wells and springs which are said to contain magic waters, witches who are said to have healing powers, fortune telling, and geomancy are causing many to fear that without the rigid controls of the past, China's countryside may return to just the kind of feudal superstitions which the Chinese Revolution had set out to extirpate many years ago.

Poster warning against "Spiritual Pollution," Taishan County *(above).*

Although China's new "open-door policy" now allows businessmen, tourists, students, and even backpackers travelling alone on individual visas to roam around with great freedom, the country's leaders still resist the idea of what they call "spiritual pollution" from the West. But just as they found it difficult to maintain the collective socialist ethic when people were being encouraged to go it alone and make money privately, so China's leaders have had a difficult time controlling spiritual pollution while the country is being deluged with music, literature, films, and fashion from the West.

Numerous campaigns and endless posters have been part of a massive but largely ineffectual propaganda drive to stem the tide of such foreign or bourgeois influences. Young people in China today are clearly enthralled by what they have been allowed to see and hear of western culture and lifestyle. One manifestation of their growing fascination with the West has been various forms of rebellion which have frequently led to outright crime.

(The youth in the above photo is portrayed as being seduced by "sentimental songs" and "pornographic music." The title of the text reads, "Thoroughly wipe out spiritual pollution.")

Public bulletin board showing photos of criminals due to be executed and detailing their crimes, Taishan County *(top right).*

All over China one now sees posters such as these as the Public Security Bureau goes about arresting and punishing tens of thousands of criminals who comprise a crime wave unprecedented in the country since 1949. Because of unemployment, the disruption of organized life during the Cultural Revolution, and the privatization of life, a campaign which has extolled wealth and individual initiative over austerity and collectivity, many Chinese have turned to quasi-legal and illegal ways of making a living.

Criminals being paraded publicly through the streets before an anticrime rally, Taishan County *(bottom right).*

Following the old Chinese adage of "scaring a hundred by killing one," the Chinese Public Security Bureau Police (white coats) have begun a campaign of public punishment which involves parades, rallies, and public executions. By January 1984, after the anticrime campaign had been in effect for approximately six months, several foreign journalists based in Peking were estimating that between fifteen and twenty thousand Chinese had been executed and untold tens of thousands jailed and sent to labor camps. ■

除恶务尽
坚决打击

Torture in the Eighties

Amnesty International's work in monitoring and protesting the mistreatment of political prisoners around the world is well known. This volume summarizes AI's reports of torture, from January 1980 through mid-1983, country by country, and provides details on efforts to prevent and outlaw torture. What emerges is the somber realization that the infliction of pain as a political tactic is not restricted to any one country, continent, or part of the ideological spectrum. This is not a pretty book; unfortunately, it is a necessary one. —*Jay Kinney*

•

Well into the 1980s torture remains an evil. The methods vary: for example, the long-used *falanga* (beating on the soles of the feet, also called *falaka*); the use of quicklime inside a hood made from the inner tube of a tyre, as reported by Guatemalan torture victims; the Syrians' "black slave," an electrical apparatus that inserts a heated metal skewer into the bound victim's anus; the *cachots noirs* in Rwanda, black cells totally devoid of light in which prisoners have been held for as long as a year or more. Some methods — pain-causing drugs administered forcibly to prisoners of conscience in Soviet psychiatric hospitals, the forcible use of techniques of sensory deprivation, and the electrodes that have become an almost universal tool of the torturer's trade — make the verification of torture and ill-treatment especially difficult.

In many countries the victims of torture include virtually all social classes, age groups, trades and professions. Criminal suspects as well as political detainees are subject to torture in many countries although the information available to Amnesty International deals mostly with political cases. In El Salvador children have reportedly been tortured, and in Iran under the government at the time of writing children held with their mothers in the women's block of Evin Jail have been forced to witness the torture of their mothers. Women often face special degradation at the hands of their male torturers. Relatives of wanted people in Syria, including adolescents, have reportedly been held as hostages and tortured to force suspects to give themselves up. Foreign nationals seeking asylum in the Congo have allegedly been tortured to force them to confess to espionage. Victims in Ethiopia have allegedly included members of several ethnic and religious minorities suspected either of supporting armed groups fighting for territorial independence or of obstructing the revolution.

Sources of evidence about torture include an increasing number of first-hand accounts from victims, witnesses and people who have seen torture victims shortly after torture. (A short discussion of medical and other evidence of torture prefaces the country entries in Chapter 7, pages 90-94.) During the 1970s a number of governments changed that had practised torture: in 1974, Portugal and Greece; in 1979, Iran, Nicaragua, Equatorial Guinea, Uganda, the Democratic Kampuchea Government, *Khmer Rouge*, and the Rhodesian administration headed by Prime Minister Ian Smith. Besides confirming that torture had indeed occurred in each of these countries on a large scale, these changes of government and the subsequent discoveries and trials provided new and detailed evidence about the inner workings of torture agencies. Unfortunately the governments that succeeded to power have not always prevented the recurrence of torture, as has happened in the 1980s in Iran, Uganda and Zimbabwe.

Torture in the Eighties
Amnesty International
1984; 263 pp.
$6.95 postpaid from:
Amnesty
International U.S.A.
304 West 58th Street
New York, NY 10019
or Whole Earth Access

Architects of Fear

I'm convinced that the florid conspiracy theories that are usually consigned to the fringes of politics are increasingly relevant to an understanding of current world affairs. Not because the theories are accurate maps of reality — they generally aren't — but because influential participants in national and international politics seem all too eager to invoke such theories and pander to their adherents in the struggle for power and votes.

George Johnson's ***Architects of Fear*** *provides both a well-researched history of conspiracy fears and a thorough survey of the major theories and their advocates in American politics today. The author's tone is admirably levelheaded throughout, neither succumbing to ridicule nor championing a pet conspiracy of his own. Johnson does admit to being a secular humanist, however, which means he is one of "The Enemy" according to certain popular fundamentalist conspiracy theories.*

Here in one book are concise summaries of the worldviews of the John Birch Society, the Posse Comitatus, the Liberty Lobby, the LaRouche followers, Evangelist Hal Lindsey, and many more. ***Architects of Fear*** *is both a useful political reference book and a ripping good read.*
—*Jay Kinney*

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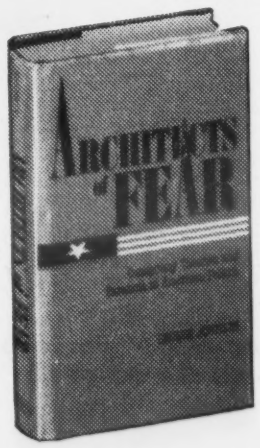
Modern biblical scholars believe 666 is a code, derived through numerology, for Emperor Nero, and that Revelation was written to comfort Christians persecuted under his reign. But for centuries, Christians have tried to show that the name of some current despot such as Hitler or Mussolini could be somehow transformed into this number.

At the same time, believers in biblical prophecy have awaited the day when only those in possession of the "mark of the Beast" will be allowed to participate in the economy. In the days of czarist Russia, Sergei Nilus, the mystic who believed the *Protocols of the Elders of Zion* heralded the coming of the Antichrist, devised a system to detect the mark of the Beast in commercial trademarks. In the United States, fundamentalists thought Franklin Roosevelt's National Recovery Administration emblem was the mark of the Beast.

In the 1980s, a Montgomery, Alabama, businesswoman named Mary Stewart Relfe has popularized the theory that the mark is the zebra-striped universal product codes, which now appear on most products. Relfe's book, *When Your Money Fails . . . the '666' System Is Here*, describes a future in which similar symbols will be invisibly tattooed by laser on our foreheads and hands like permanent credit cards. Just as computerized cash registers now read the marks on merchandise to determine prices, in the future, Relfe believes, they will read the marks on our bodies to debit our bank accounts.

Architects of Fear
(Conspiracy Theories
and Paranoia in
American Politics)
George Johnson
1983; 252 pp.
$15.70
postpaid from:
Jeremy P. Tarcher, Inc.
9110 Sunset Blvd.
Los Angeles, CA 90069
or Whole Earth Access



Indigenous Peoples' Network

The Indigenous Peoples' Network, IPN, is a group with a critically important task: disseminating information on situations facing indigenous people that is available in few, if any, other sources. The IPN puts out Emergency Bulletins containing information and suggestions for action; some of the stories are later picked up by more mainstream media, although most are stories that would not appear except in these Bulletins. IPN was founded by editors of ***Akwesasne Notes*** *(**NWEC** p. 385), another important source of information on Native Americans and other indigenous people. IPN Emergency Bulletins are important not only for the information available nowhere else, but for the urgency of the situations reported. Many situations involve immediate response in the form of letters, material aid, and publicity. And, as with most small, independent sources of information, IPN is usually in need of funds with which to continue its much-needed effort.*
—Ellen Klaver

Indigenous Peoples' News Emergency Bulletin
Indigenous Peoples' Network, Editor

$15/year (6-8 issues)
from:
IPN
3309 16th Street N.W.
Washington, DC 20010

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During the course of 1983, I.P.N. helped to break several major stories concerning Indigenous Peoples, and conducted a number of human rights emergency activities. . .

Las Hojas Massacre: A massacre at a Nahuatl Indian Community in El Salvador, inflicted by Salvadoran Army personnel, resulted in a denunciation by a delegation from the Community before the U.S. Congress. Upon return to El Salvador, members of the delegation were intimidated by Death Squads, and one was arrested and formally charged with murder. I.P.N. played a part in an international campaign to generate press and human rights attention, and the Nahuatl leader who had been arrested was released and the local Army Commander was restrained from further persecution of the Community.

Arrest of C.I.S.A. Leadership: Cracking down on Marxist-Leninist-Maoist Shining Path guerrillas, the Peruvian Government cast a wide net that brought into suspicion all grass roots Indian organizations. The South American Indian Council (C.I.S.A.), an international communications and lobbying effort on behalf of South American Indian peoples, based in Lima, had its offices ransacked and several staff people arrested. An I.P.N. Emergency Bulletin helped stimulate expressions of concern from international quarters. All those who had been arrested from C.I.S.A. were released.

Kokatha Aborigines in Australia: An I.P.N. Emergency Bulletin was produced in August depicting the conflict between two uranium mining companies and Aboriginal Peoples in Australia over the building of a road through an Aboriginal Sacred Dreaming Land and soliciting expressions of concern to be addressed to the Australian Government. A radio program was produced for and aired on National Public Radio through the efforts of an I.P.N. editor.

NACLA Report on the Americas

The North American Congress on Latin America (NACLA) has been around for so long — since 1966 — that I've tended to take them for granted. Springing from the New Left milieu — especially those circles who tended to see Third World revolutions as the sparkplugs that would initiate change back in the U.S. — NACLA has matured over the years. These days, with Latin America very much in the news, NACLA's specialty — thorough reports and analysis of the political economy of the Americas — has never been more pertinent. Recent issues of their bimonthly ***Report on the Americas*** *have included studies of the role of religion in Latin American politics, media coverage of Central American warfare, and an extremely helpful special issue on El Salvador prepared by* ***Estudios Centroamericanos****, the journal of the Jesuit-run Central American University in El Salvador. (Single copies of these issues are $3.75 postpaid.) The time for taking NACLA for granted is over.*
—Jay Kinney

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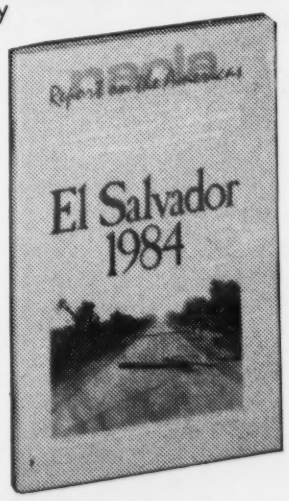
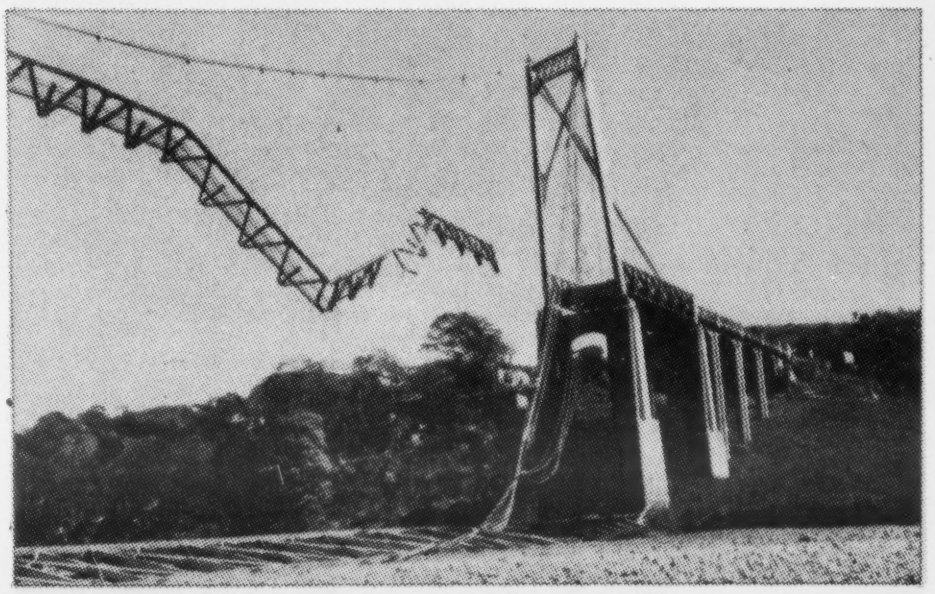
Since early November 1983, the Reagan Administration has increased pressure on the Salvadorean government to halt death squad activity and take action against officers "strongly suspected" of links to rightist terror. The U.S. Embassy has accused two heads of intelligence with the security forces, three field commanders and a departmental intelligence chief, as well as the head of security for the Constituent Assembly.

Military Order no. 15 of November 25, 1983, made changes in the Army hierarchy that affected some of those accused. Nevertheless, a significant number of men singled out for criticism continue in different military posts. In part, this appears to reflect the existence of Army decision-making levels above the defense minister, in charge of reshuffling military commands and ideologically close to the officers named by the embassy. The mere existence of this unofficial hierarchy indicates either the defense minister's lack of real power over the military, or his complicity in this kind of behavior. The November reshuffle appears to have had less to do with political change than with the desire to strengthen field commands with officers able to offer better results in the fight against the FMLN.

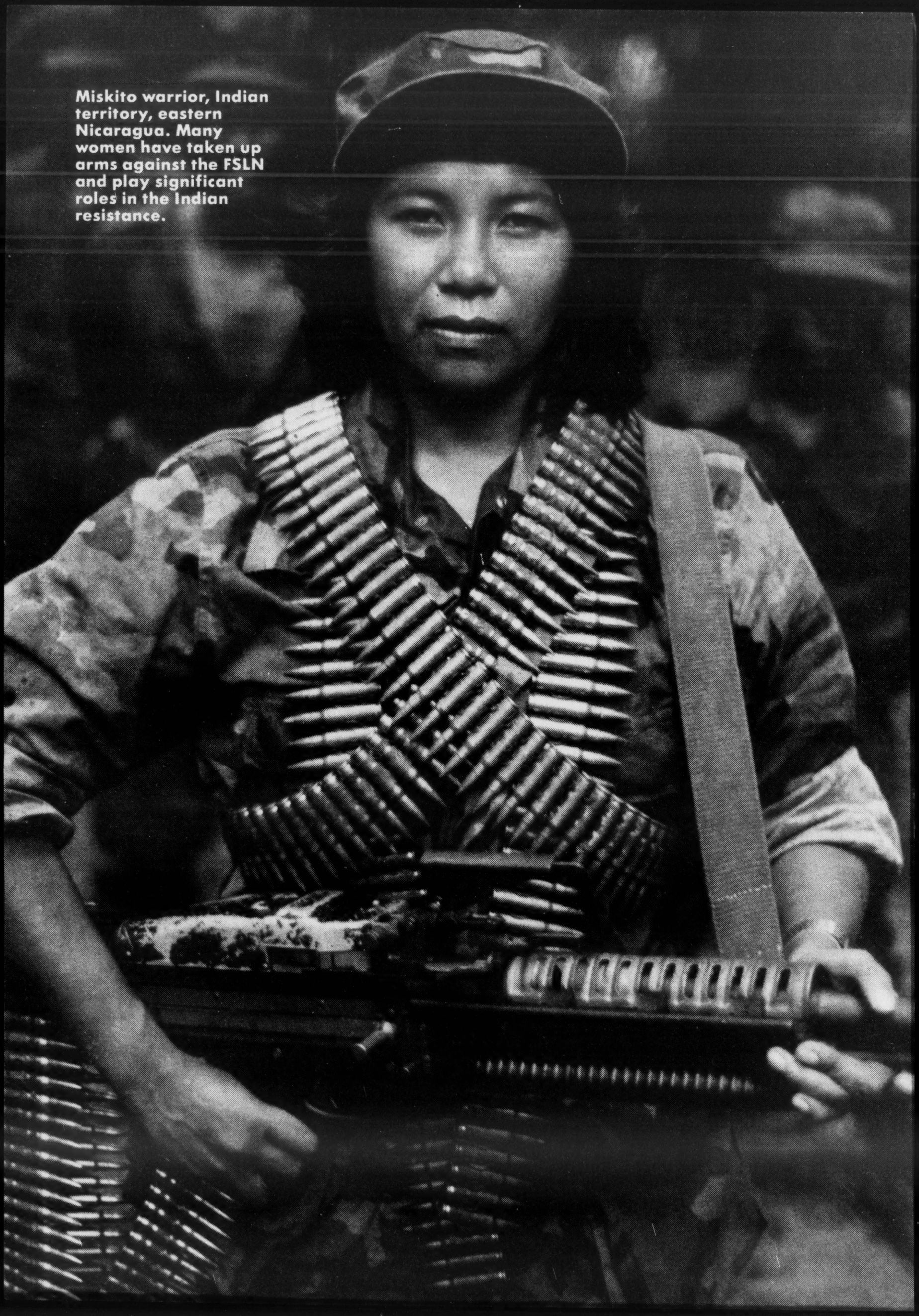
The continuing surrender of government troops, sometimes entire companies, shows the morale problems that still afflict the armed forces. The rate in fact increased after September 1983. Sagging morale is also reflected in the token resistance mounted to FMLN attacks. In the assault on Tejutepeque, for example, the local detachment of 180 soldiers changed into civilian clothes and fled to Ilobasco as soon as the attack began.

NACLA Report on the Americas
George Black, Editor
$18/year (6 issues)
from:
NACLA
151 West 19th St., 9th flr.
New York, NY 10011





The Cuscatlan bridge in El Salvador, after guerrilla attack, December 1983.



Miskito warrior, Indian territory, eastern Nicaragua. Many women have taken up arms against the FSLN and play significant roles in the Indian resistance.

NICARAGUA'S OTHER WAR

Indian Warriors vs Sandinistas

by Bernard Nietschmann *photos by Bernard Nietschmann*

Last January I visited Nicaragua's Miskito, Sumo, and Rama Indians in refugee camps in Costa Rica and inside Nicaragua, where they are fighting the Sandinista government. This was my third unofficial trip inside Nicaragua since mid-1983 to talk with villagers and Indian military leaders. The Indian perspective is seldom sought and almost totally absent from discussions of the Indian-Sandinista conflict. I would like to share the rationale and goals of the Indians who are actively resisting the Frente Sandinista de Liberacion Nacional (FSLN), and to place these within the context of other interpretations that are often given by the media, the United States, the Sandinistas, and the Indians' supposed allies, the Fuerza Democratica Nicaraguense (FDN) and Alianza Revolucionaria Democratica (ARDE).

Miskito, Sumo, and Rama Indians have been fighting the Nicaraguan government for three years. The Indians were the first group to militarily oppose the FSLN, beginning in February 1981 (a year before the FDN and two years before the ARDE). Their resistance is widespread, longterm, and determined, and operates throughout Indian territory in eastern Nicaragua and from border areas near Costa Rica and in Honduras. The Indians do not see themselves as *contras* (counterrevolutionaries) but as Indian revolutionaries fighting for Indian objectives. Their struggle is in many ways part of the overall anti-Sandinista war, but their reasons and goals are not. They are fighting to establish their rights for self-determination, to regain their traditional lands, and for autonomy. They are fighting for Indian control of Indian territory, not to overthrow the Sandinista government or to make it more democratic. As one Indian leader told me: "The *contra* groups like the FDN and ARDE are fighting for democracy and representative free elections. We are fighting for something else. We are not fighting for democracy — we never had it from any government. We are fighting for something that was taken away from us. We are fighting for our land. For an Indian, freedom is land, not democracy."

From the Indians' perspective, all governments in the Americas are anti-Indian. Indians are dying in Guatemala and in Nicaragua. Indian lands and cultures everywhere are under attack by the state, be it right wing, left wing, military junta, democratic, Marxist, or whatever. However, the Nicaraguan Indians have decided to resist rather than passively accept decisions forced upon them.

The Miskito have centuries of resistance experience and are prepared for a prolonged war. Since the sixteenth century they held off efforts to colonize Indian territory, culminating in 1800 when they expelled a Spanish force more than 20 years before other anti-Spanish wars of independence established free states in Latin America. The Treaty of Managua (1860) gave autonomy to what was called the Miskito

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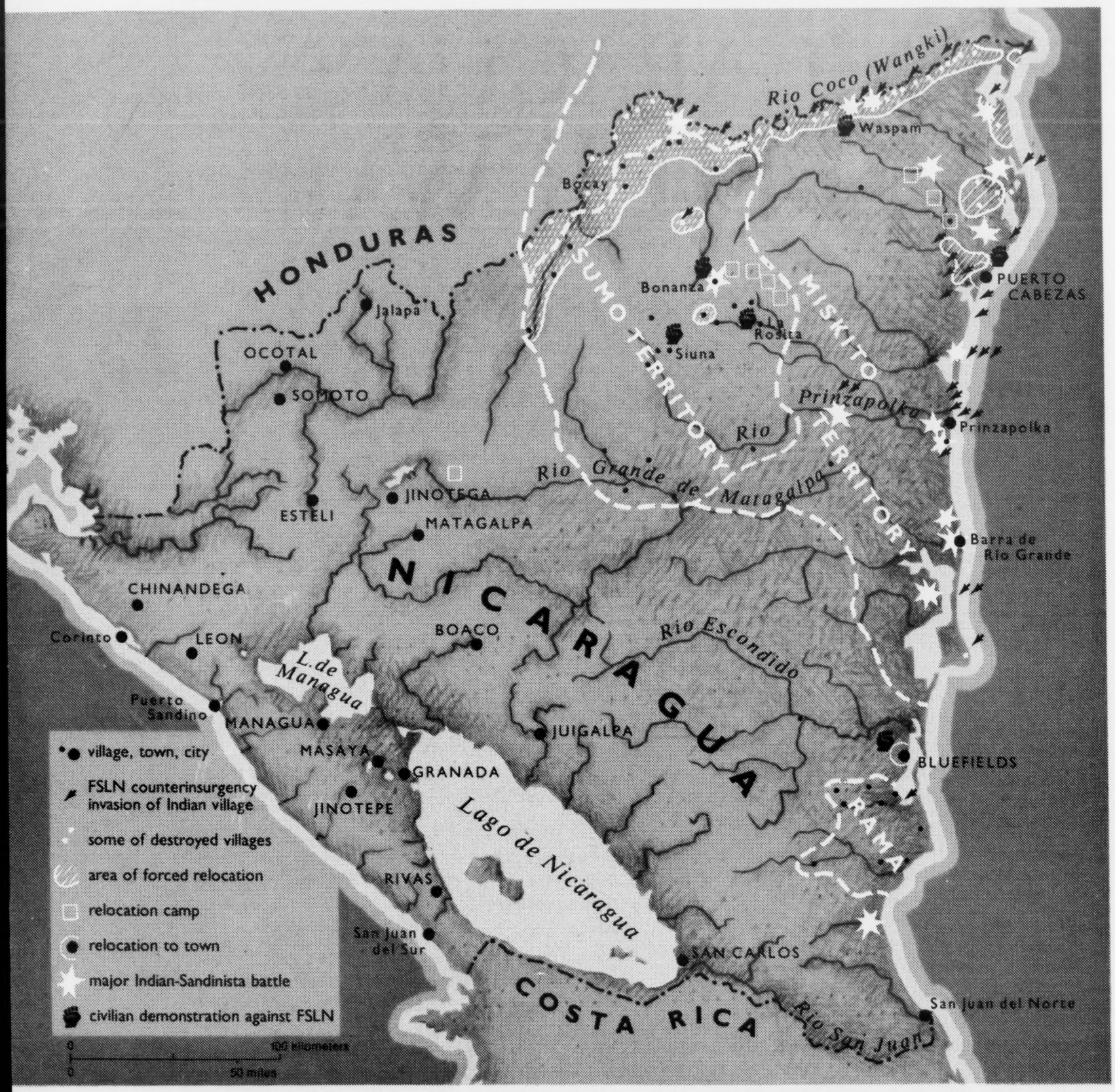
One of the most difficult factors in assessing Nicaragua since the overthrow of Somoza has been the volatile conflict between the new government and the Indians who live in the eastern part of the country. Since some of the Indians who are fighting the Sandinistas receive indirect CIA support, it is tempting to discount them as mere pawns of U.S. counterintelligence policy in the region. However, as usual, things are not so simple, especially when an element central to any understanding of the situation has been missing: the views of the Indians themselves. Bernard Nietschmann is a professor of geography at the University of California at Berkeley, specializing in cultural and maritime geography. His research with the Miskito, Sumo, and Rama Indians over the past 15 years has given him unique access to Indian warriors. This article endeavors to present the Indians' perspective on their own struggles in Nicaragua. A slightly different version of this article appeared in the Early Spring 1984 issue of ***Akwesasne Notes*** *($8/year from Mohawk Nation, via Rooseveltown, NY 13683).*

—Jay Kinney



MAP BY DON RYAN

Reservation, the eastern coast of Nicaragua, but in 1894 a Nicaraguan military force invaded the area to "reincorporate" it into the nation. During the twentieth-century dictatorships, the Miskito, Sumo, and Rama maintained control over their village communal lands and resources, but government leases given to foreign companies bypassed Indian determination over land and natural resource use in many areas of their territory. After 1979, FSLN agrarian reform aimed to expropriate under state control land deemed to be underused or misused. The Indians' ecologically adapted land use system depends on having large amounts of land lie fallow while small amounts are cultivated. Forest reserves, pasture land, and surplus land for future population growth are integral parts of each community's territory. What the FSLN saw as surplus land was transferred to state control for eventual development and redistribution. The Indians saw this as outright theft of their lands backed by a massive military presence and foreign advisors. The FSLN believed that the revolution gave them the right to "integrate" Indian lands and peoples into Nicaragua; the Indians saw that the revolution gave the FSLN the power to do so but not the right. Decisions over Indian land and peoples were an Indian right.

The Indians seek to maintain communal ownership of their village lands, which collectively constitute Indian nations, and to continue their primary allegiance to those nations as

The war between the Indians and the Sandinistas began over who was going to control indigenous territory and peoples. As such, it is one of the many Fourth World wars currently being waged on every continent.

PHOTOS BY BERNARD NIETSCHMANN

Indians and Creole MISURASATA warriors on patrol inside eastern Nicaragua. MISURASATA and MISURA are Indian guerrilla groups whose names are derived from combining *MIskito, SUmo, RAma*.

distinct peoples. The FSLN seeks to incorporate what they see to be ethnic minorities into the revolution as citizens whose allegiance is to the revolution and whose territories are to be brought under national sovereignty.

Professor John Bodley of Washington State University writes in *Victims of Progress*[1], a worldwide survey of programs and peoples to control and transform indigenous peoples: "It has become fashionable to describe tribal peoples as national minorities, and as such to even speak of them as obstacles to national unity and sources of instability. Newly independent nations have been eager to politically incorporate zones that former colonial governments had left relatively undisturbed, on the theory that such zones had been deliberately perpetrated in order to create division within the country."

The war between the Indians and the Sandinistas began over who was going to control indigenous territory and peoples. As such, it is one of the many Fourth World wars currently being waged on every continent. At present there are some 20 resistance movements involving indigenous peoples against states, including the Nagas, Sikhs, Misoran, and Kachims in India; the Kalinga and Muslim groups in the Philippines; the Papuans, Timorese, and Mollucans in Indonesia; the Mujahedin in Afghanistan; the Maya, Zapotec, and Mixe in Guatemala and Mexico; and the Ovimbundu, Harrah, and Bantu in South Africa and Namibia. The Miskito, Sumo, and Rama are fighting for an autonomous region similar to what the San Blas Cuna have won by force in Panama, the Naga in Assam, and the Nilotic and Sudanic peoples in Southern Sudan.

One Miskito warrior inside Nicaragua asked me, "Why do Sandinistas want to take over Indian land and my people? We don't want to go to the west coast to force our ways on them. They should have helped us develop our Indian land and people, not compel us to their ways. They started this war by coming here with their policies and military. We will end the war at the borders of our land."

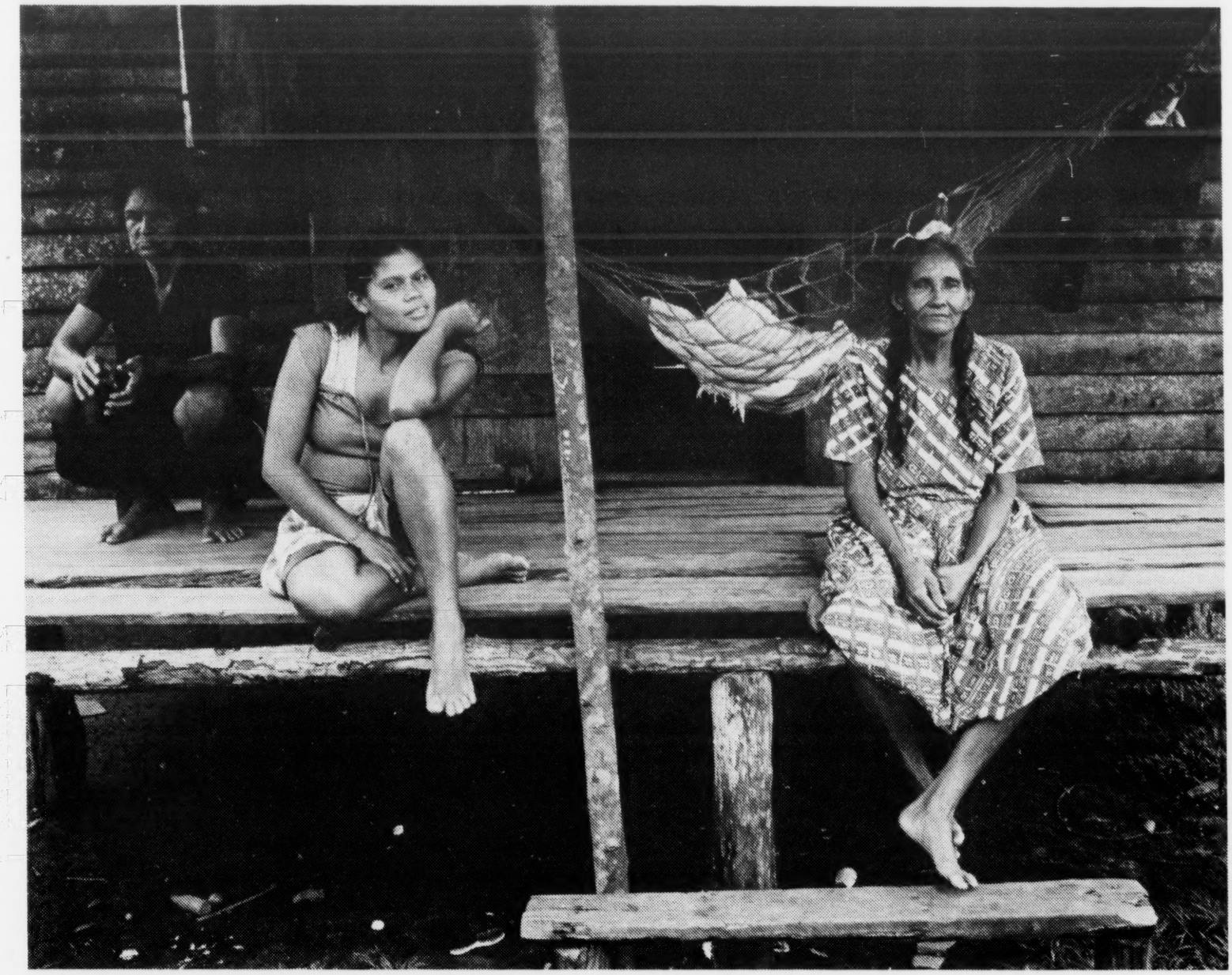
The Indian resistance is hidden and misinterpreted due to the larger international situation involving Nicaragua, Cuba, the Soviet Union, the United States, and Honduras. Beneath the political rhetoric the Indian-Sandinista war is a conflict between the power of the state to impose and the capacity of the Indians to resist. The Nicaraguan wars are a boxes-within-boxes conflict — Indians against state control, Nicaraguans against Marxist-Leninist control, the United States against FSLN control — which conveniently and simplistically have been interpreted as one war, one conflict, one source, one goal. The FSLN has attempted to attribute the goals of the U.S., FDN, and ARDE to the Indians, and the U.S., FDN, and ARDE have tried to align the Indian resistance to their goals.

Because the Indians' limited goals do not fit into the two-dimensional "right vs. left" analyses of the Nicaraguan conflict, they are made

1. *Victims of Progress,* $9.95, Mayfield Publications, 285 Hamilton Avenue, Palo Alto, CA 94301.

Members of one of the families that have been broken up by the Indian-Sandinista war. Indian territory, eastern Nicaragua.

to fit. At the international level the Indian resistance is usually referred to paternalistically as "U.S.-backed disaffected Indian *contras*," as if the Indians were not fighting for their own reasons. (This is the equivalent of saying "French-backed disaffected colonists" to describe the forces that opposed the British during the American Revolution.) The United States uses the violations of Indians' human rights to discredit the Sandinista government, conveniently ignoring what the Indians are fighting for and focusing only on what has happened to them. A strong pro-indigenous stance is hardly part of U.S. domestic or international policy. The FSLN, while maintaining that the Indian opposition is externally provoked and manipulated as part of CIA-directed destabilization efforts, recently has admitted mistakes and errors in their Indian policies and has released many Indian political prisoners and announced a general ill-defined amnesty that is to date unattractive and being ignored by Indians fighting, in exile, and in refugee camps. (Although the amnesty is an important first step toward political negotiations, the Indians do not see anything to come home to. In fact, since the December '83 amnesty, Indians have continued to flee Nicaragua. To counter this embarrassment, the Nicaraguan government has falsely accused the ARDE and FDN of prohibiting Indian refugees from leaving Costa Rica and Honduras.) And the Indians' military allies — the FDN and ARDE — are unsupportive of the Indian goal of autonomous control over Indian territory, resources, and peoples. In the face of the still-unresponsive Sandinista government, the Indian resistance must continue these alliances to obtain weapons and logistical aid. Yet the Indians realize that their supposed allies are limiting support to reduce the Indians to small-scale guerrilla activities and to prevent them from becoming a well-armed army of Indian nationalists. Even if the current conflict were "solved" politically or militarily, the Indians will continue to fight if they don't regain their land and achieve self-determination. In the midst of this struggle, they actively plan for what unfortunately may



Miskito women in a village in central eastern Nicaragua.

be the next war, Indians versus non-Indians, eastern Nicaragua versus western Nicaragua.

As hopeless as their situation may appear, the Indians are determined to continue and they do have many advantages. Like the Afghanistan rebels, they base their resistance on the cohesive yet decentralized structure of their village societies, which are cemented by strong cultural and religious identities and the centuries-old warrior tradition of the Miskito, who have never been dominated militarily in their extensive and rugged territory. This is the situation that fuels their determination to fight on: 1) one-fourth of the coast's 165,000 Indians are in military-controlled "relocation camps" or in refugee camps in Honduras or Costa Rica; 2) one-half of the Miskito and Sumo villages have been destroyed; 3) Indian rights to self-government, traditional land, and resources have been abolished; 4) subsistence cultivation, fishing, and hunting are strictly controlled, and access to staple foods is so limited that hunger is an everyday problem and starvation a probability in many communities; 5) many villages have had no medicine or doctors for over two years; 6) freedom of movement is denied or severely restricted; 7) more than 35 Indian communities have suffered massive Sandinista invasions during which civilians have been arbitrarily arrested, interrogated, tortured, killed, raped, and robbed, and had livestock and crops destroyed. These attempts to force the villagers to divulge the locations of the Indian warriors' secret base camps and to terrorize them into not supporting the warriors have been unsuccessful. As bad as it was under the 43 years of Somoza dictatorships, however, the Indians have suffered much more in the four and a half years of the Sandinistas.

During their three years of armed resistance to the FSLN, the Indians have not lost a military confrontation. In addition to numerous guerrilla skirmishes, they have fought several major head-to-head battles against Sandinista forces, including the battles of San Carlos (January 1982), Seven Bank (July 4, 1982), Limbaika

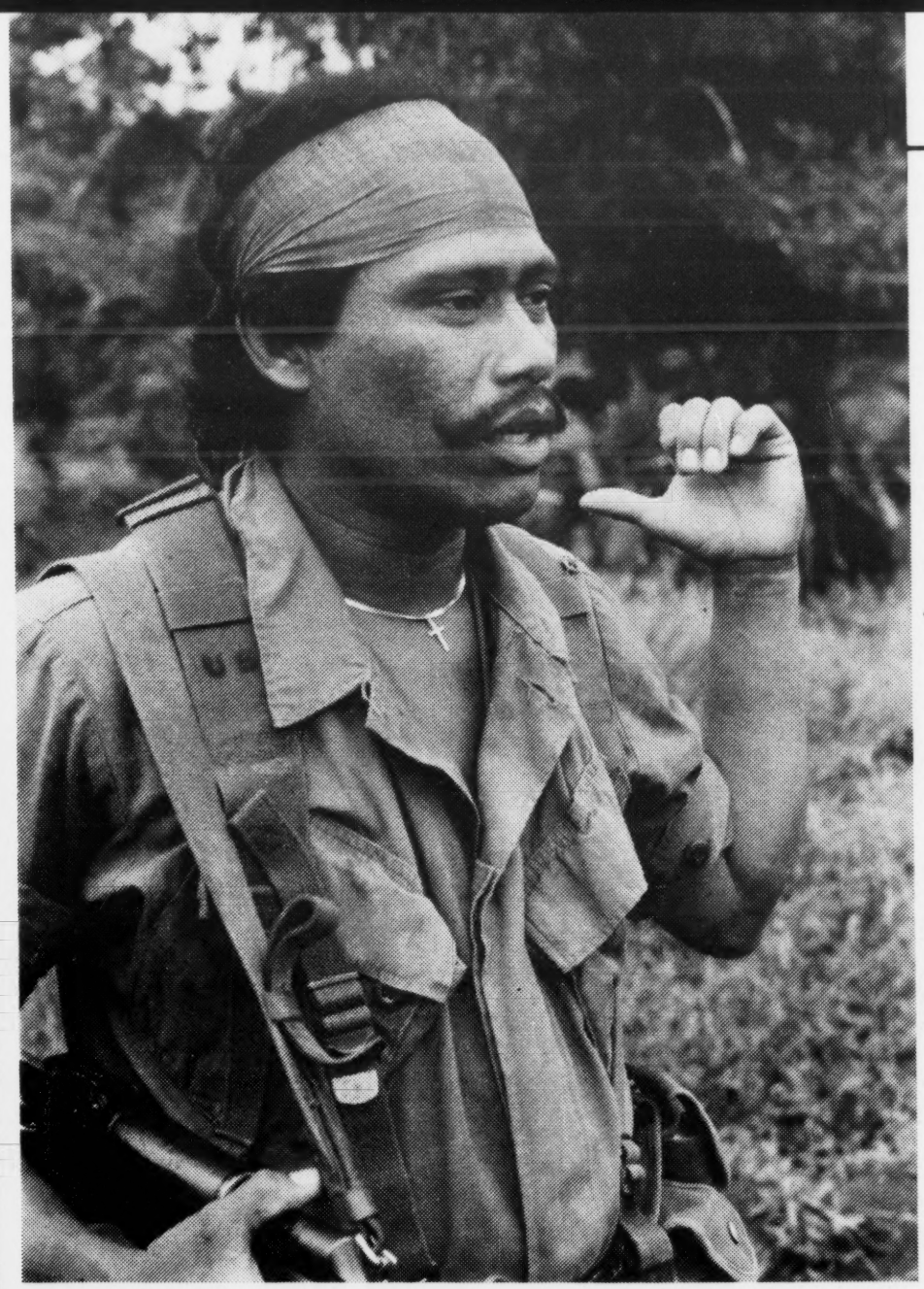
(Above) **MISURA warriors inside Nicaragua with AK-47 and M-16.** *(Opposite page)* **A Miskito warrior commander. Note U.S. marking on arms strap.**

(August 1982), La Tronquera (May 13, 1983), Gunpoint (June 23, 1983), Haulover to Puerto Isabel (October 1983), and Waspam and Leimus (March 1984).

The October 1983 Indian-Sandinista battle in the Haulover to Puerto Isabel area was the biggest of the war and one of the major confrontations waged by anti-Sandinista forces. Sandinista soldiers who came to the warrior-controlled village of Haulover on October 1 to forcibly relocate the civilian population were met by a large resident force. Surprised by the scale of the resistance, the Sandinistas brought in several thousand more soldiers and used "push and pull" airplanes and helicopters to bomb Indian warriors and civilians (65 bombs were dropped during an 11-day period). Eleven civilians died from the bombings and 27 more died from sickness and hunger when the villagers fled for a month into the mangrove swamps to escape the bombings, strafing from coastal patrol vessels, and land battles. Running low on ammunition after several days of widespread battles, the warriors retreated into the mangrove. The Sandinista forces suffered heavy casualties. The Indians lost seven warriors.

Keeping in mind that the Indian struggle is dedicated to Indian goals, let us consider some of the possible future alternatives for the Indian-Sandinista conflict. First, the Sandinista military solution to control the Indians has not worked. After several years of fighting the Indians it should be evident to them that they cannot defeat the Indian forces permanently established inside Indian territory. Furthermore, so-called Indian "leaders" working with the Managua government do not represent Indian interests or the vast majority of Indian noncombatants, certainly not the Indians who are fighting. While these "leaders" may be important to the FSLN for seeking international support of their Indian policies, they do not represent a solution for the actual domestic conflict. Meanwhile, the Indian forces are limited by the quantity of arms they can obtain from their FDN and ARDE allies or from Sandinistas they engage in battle. As limited as they might be, however, they are willing to continue for years if necessary. But they also see that their current position — though marginal because of the military superiority of the FSLN and the control exerted by their supposed allies — actually gives them considerable leeway in future decisions.

Based on my discussions with Indian leaders



Because the Indians' limited goals do not fit into the two-dimensional "right vs. left" analyses of the Nicaraguan conflict, they are made to fit. At the international level the Indian resistance is usually referred to paternalistically as "U.S.-backed disaffected Indian *contras,*" as if the Indians were not fighting for their own reasons.

about their struggle, I want to present four hypothetical situations for future actions:

1. The Indians could continue as they are, underarmed and undersupported by their allies, and simply try to wear down the Sandinistas militarily and economically until the war becomes too costly for the FSLN and some sort of resolution is achieved, either independently of the FDN and ARDE position or as part of it.

2. The Indians' FDN and ARDE allies could take a strong, pro-Indian position, sign and support treaties for Indian control of Indian land, and provide greater logistical and arms support to help the Indians push the Sandinistas from eastern Nicaragua. The Indians have a potential force of 10,000 warriors and they represent the quickest way to massively expand military pressure on the FSLN.

3. Another outside interest — China, for example — could step in and provide arms and logistical support to the Indians to establish a political beachhead in the Americas.

4. Or, the FSLN could evolve a much-needed pro-Indian policy, recognizing that Indian land and self-determination aspirations are not "counterrevolutionary," and begin negotiating with authentic Indian leaders to adapt some of the revolution to the Indians, not just the Indians to the revolution. If the FSLN were to guarantee Indian control of traditional Indian land, help rebuild the destroyed villages, and arm the Indians, they would solve a military problem, isolate FDN and ARDE forces by breaking the connecting guerrilla link in eastern Nicaragua, allow the Indians to defend their territory from *contra* incursions, and thus be able to concentrate their FSLN forces on the northern and southern borders.

Of the three anti-Sandinista wars — the FDN, the ARDE, and the Indians — the Indian conflict would be for the FSLN the easiest to resolve. On the other hand, it would also be the easiest to expand. These options to shut down or open up Indian resistance will be accepted by the Indians to the extent that they see the possibilities to achieve their goals of self-determination and Indian control of Indian land. ■

THE GREY-HAIRED OIL SHEIK OF DOWNING STREET

ENGLAND FAILS THE ABUNDANCE TEST

by Szanto *Illustrated by Tim Eagan*

IN LONDON IT IS COMMON for the British to snigger at the obvious excesses of oil-rich Arabs driving lime-green Rolls Royces and gold Mercedes Benzes. The London newspapers carry pictures of vast industrial complexes sinking into the sands as the oil wealth is frittered away. Londoners shake their heads sadly as oil-rich Nigeria falls victim to corruption and excess. But there is one resident of London who has benefited from the misuse of oil wealth more than any Arab or Nigerian, and few Britons know who that is. She is the resident of Number Ten Downing Street, Margaret Thatcher, Prime Minister of Great Britain. Mrs. Thatcher is fond of delivering lectures on the virtues of frugality and hard work. She has built her popularity by a combination of tax cuts and holding down government spending along with her famous victory in the Falklands. But what she has not told her people is that her popularity has been bought at a terrible price: throwing away the one-time gift of oil wealth. When it is gone there will be little to show for it except Mrs. Thatcher's name in the history books.

To understand the potentially destructive impacts of oil wealth we need to get a sense of how international trade and currency exchange rates work. The system is quite complex, but to under-

Gordon Sherman, the man who started Midas Muffler and who was the first corporate funder of Ralph Nader, says that there is only one critical shortage in the world: Expedients. We have enough people, capital and resources, but we have run out of expediencies, the short term Band-Aids politicians love so dearly. This is a story of how oil lubricates politics, and when the oil runs out, England will have lost its last expedient. Winston Churchill once said "you can count on Americans to do the right thing after they have tried everything else." Let us hope he speaks for England too. Szanto, our anonymous writer, has met Thatcher, is in London often, and knows well of what he speaks. File the article and bring it out in five years. He has that kind of prescience. —*Paul Hawken*

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stand it we can simplify it a bit. In general anything that a country buys overseas must be paid for by selling something overseas. If its foreign sales and purchases are not equal, then the adjustment that is needed occurs in the value of its currency relative to other monies.

Let's consider an example to see how this works. If Britain wants cars and it has no steel to make them, then it must buy the steel from somewhere else. In theory it could not only make cars for its own use but could sell some overseas to pay for the steel. The price of its cars to a foreign buyer would be the sum of two things: the cost of making the car in Britain, and the relative value of Britain's currency. If the British pound's value is relatively high the price of the British car will be relatively high, and if the pound is low the car will be relatively cheap. Also, a high pound will buy more steel, a lower pound less steel. If, however, other countries don't want British cars and Britain isn't able to sell enough to cover its steel purchases, then the pound will decline, making British cars cheaper and reducing the British ability to purchase foreign steel. The exchange rate is the mechanism for keeping exports and imports in balance.

The exchange rate is also a measure of the relative competitiveness of countries. If the cost of manufacturing a car in Britain is relatively low because labor costs are low or productivity is high, then British cars will be relatively cheap and Britain can afford to have a higher exchange rate. (Higher quality cars can have a similar effect.) This also means that Britain can get its steel more cheaply.

Exchange rates are affected by a number of things, including interest rates, monetary policy, and the confidence foreigners have in the economy. But over the long run it is the relative competitiveness of countries that drives exchange rate movements. If one country is more competitive than another, then over time the first country's currency will appreciate relative to the other.

TO UNDERSTAND WHAT ALL THIS has to do with oil we have to look at the nature of Britain's economy before and after oil was discovered in the North Sea. Like many other resource-poor countries, Britain bought most of the resources it needed abroad, and used those resources to feed a manufacturing industry. It sold those manufactured goods at home, but it also sold them abroad, to pay for the resources. Remember the Austin-Healy, the TR-4, and the MG Midget? British manufacturing was in decline before oil was found, sinking slowly because of high wages and low-quality goods. Oil wealth has accelerated this decline while offering little in return.

In the late fifties an immense natural gas field was discovered in northern Holland — the Groonigen field. The size of this discovery led oil company geologists to believe there might be more hydrocarbons in the area. Throughout the sixties, therefore, there was a dramatic increase in oil exploration in the North Sea by the United Kingdom, Norway, and Holland. The Dutch didn't find much more, but the Norwegians and the British did. However, the development of this oil was carried out by U.S. oil companies as much as by the two European giants, Shell and British Petroleum. In fact, the biggest producer in the region is a partnership between the two largest companies in the world — Exxon and Royal Dutch/Shell. They operate the huge Dutch gas fields and the largest British fields as well. Shell also controls the biggest Norwegian gas field, the as-yet-undeveloped Troll field. Most of these discoveries were made in the late sixties and early seventies, before the first oil price rise in 1973. However, even then some companies anticipated a significant increase in the price of oil and so went ahead with plans to develop North Sea oil even though it was more expensive than Middle East oil. This development turned out to cost vastly more than anticipated by a factor of roughly seven times. Fortunately for the developers, OPEC raised the price of oil high enough to cover what would otherwise have been a very bad bet.

THE HIGH DEVELOPMENT COSTS had a significant impact on the British economy. By 1980 those costs had reached 20 billion pounds, two-thirds of which came from British sources. Of the 14 billion pounds spent by the British a significant fraction — about one-third — was spent abroad to buy foreign goods and services such as higher quality steel, electronic controls, oil platforms, and geological services. The money spent on North

Sea development was not available for other purposes, such as modernizing the British automotive industry. Britain was, of course, better off than nations which had no oil of their own, because it did not have to pay for expensive OPEC oil. Much of the direct benefit of the North Sea investment was felt in and around the urban areas of Scotland as companies serving the North Sea grew and employment grew with it.

The greatest beneficiary of North Sea development is the British government. Under British law nearly all North Sea oil must be sold to the British National Oil Company (BNOC). The producing companies get to keep a fraction of the oil to cover their production costs. On that oil they must pay several different taxes, including an oil production tax, an advanced profits tax, and a corporate income tax. Thus if a barrel of oil sells for $30 the take is divided in several ways. The oil companies spend about $15 to produce the oil. For this they receive what is called equity oil. Of the remaining $15 the government gets the next 85 percent in taxes. The companies get the last 15 percent of that second $15 or 7.5 percent of the total.

The government's direct income from the North Sea is now running about ten billion pounds a year. It gets another seven billion pounds from the sale of BNOC's oil. Together these add up to about five percent of Britain's GNP. This is about what Britain receives from the national sales tax, about half of what it gets from income tax, and more than it borrows. Because it wanted revenue, the British government encouraged rapid development and high production. Britain is now producing about 2.5 million barrels of oil per day and exporting about 60 percent of that. Rapid development and production, however, mean rapid depletion, and by 1987 production will begin a long slow decline. Britain will be self-sufficient in oil beyond the end of the century, but it will cease to be a major exporter by about 1990. Furthermore, future production will rely on new, smaller, more costly fields, so revenue, too, will begin to decline in 1987. As long as prices and production went up, government revenue rose. But as production declines, prices weaken and costs rise — a new field will cost $20-30 per barrel to produce — revenue will fall very rapidly, even faster than production.

The British government benefited profoundly from the second oil price rise in 1979-80, especially because oil trading is done in dollars and the pound is relatively weaker than the dollar. However, Mrs. Thatcher's policy of keeping the oil taps wide open was a major contributor to the fall in the price of oil. To encourage rapid development, an earlier government had promised the oil companies not to restrict production. Consequently, while OPEC production was cut in half, British production accelerated rapidly, roughly doubling between 1977 and 1983. With Britain and Mexico the major contributors to the oil glut, world demand fell and the price of oil dropped five dollars a barrel. Further drops are likely.

TO GET A SENSE OF THE IMPACT of this on Britain, you can compare what happened in Britain with what happened in Japan. Like Britain before oil, Japan is a resource-poor country that must export to survive. Faced with oil price increases in the seventies, Japan had to increase its export capacity. It modernized its industry rapidly, kept wages relatively low, and kept the value of the yen as low as it could. Thus its manufactured goods were high quality and relatively low priced. The most recent figures for Japan show a surplus of manufactured exports of nearly $37 billion per year. In comparison, in 1983 Britain imported more manufactured goods than it exported for the first time in history. Why?

As oil exports increased, other British exports also increased, and foreign capital flowed into Britain to pay for the development of the North Sea. The combined effect was to raise the value of the pound by the mechanism described earlier. By 1980 the value of the British pound was about $2.40. This meant that other British goods like cars and textiles were more expensive to foreign purchasers and imported goods were less costly to British buyers. Of course, British exports declined and imports increased. This was exacerbated by the decline in quality of British goods made in outmoded plants as compared to higher quality goods made abroad. Eventually the pound adjusted and is now worth about $1.50.

The deeper effect was the impact on British industry. Serious economists, especially some influential in the Thatcher government, argued that Britain should deindustrialize. To balance the system as oil exports increased, manufactured exports should decline. Furthermore, oil profits should be invested abroad rather than in Britain, because there would be few good investment opportunities at home. Critics argued that this would lead to three million unemployed, 15 percent of the labor force, and the collapse of the traditional industrial regions of Britain. Indeed this is exactly what has occurred. Unemployment is now above three million and cities like Liverpool, Leeds, and Newcastle look like the targets of massive bombing raids. Even though the world economic recovery has affected Britain, whose GNP is now growing rapidly, unemployment continues to rise. There is no longer an increase in jobs in Scotland from North Sea development. Indeed, jobs are declining as new development

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opportunities diminish. Shell recently cancelled an 18-million-pound order for British steel pipe for the North Sea because its quality was unacceptably poor, and ordered it instead from Japan, which offered better quality and cheaper prices even after hauling it all the way from Japan.

It is also true that British investments abroad have increased. Between 1978 and 1982 they rose from 10 billion to 40 billion pounds. British Petroleum bought out SOHIO, Shell bought Massey Coal, and the Midland Bank bought the Crocker bank in California. The current Chancellor of the Exchequer, Nigel Lawson, recently argued that these foreign investments would provide income when oil revenues decline. He is literally correct, but that money will not make Britain's economy more viable. That future income will protect the value of the pound and permit Britain to continue to pay for its imports, but at the cost of a declining nation.

THE OTHER MAJOR IMPACT of the oil revenues was on the government directly. Because of the oil revenues Mrs. Thatcher has been able to cut taxes and reduce government borrowing. This in itself is not a bad thing. Tax rates in Britain are high, much higher than in the U.S. Because of inflation Thatcher, like the U.S., kept the money supply tight and therefore interest rates high. She used some of the revenues to keep unemployment benefits relatively generous. However she has also cut government spending on education and the physical infrastructure of the economy — roads, communication, etc. She has increased defense spending, including more than four billion pounds to build fortress Falklands — about $2 million per inhabitant on those dreary windswept islands. (I can't help but wonder whether, had the inhabitants been offered the cash instead, they might not have happily taken their millions and gone somewhere else rather than support Mrs. Thatcher's pride in victory.)

The net result is that manufacturing activity in Britain today is about at the level of 1962. It has gone backwards by two decades. If Britons were genuinely in favor of a less industrial and more bucolic society with an ever-growing fraction of its population on the dole, then this might not be such a bad thing. But there is little evidence to support that view. Furthermore, when oil revenues decline in a few years there will be little industrial base to build a new export potential from. The value of the pound will almost certainly fall rapidly — to about a dollar in terms of what it really buys for the average Briton. Government spending will be squeezed, so it will have to spend less, tax more, or borrow more. None of these will promote what will be needed — a massive increase in manufacturing investment.

What might Thatcher have done? First, she could have developed the oil more slowly — stretching the benefits and minimizing the disruption. Second, the revenues could have gone into modernizing a terribly antiquated industrial plant. Third, she could have invested in education and retraining for the labor force to bring it up to the standards of its major competitors. Fourth, she could have improved Britain's poor road, sewage, and communications systems. Fifth, she could have increased research and development to improve Britain's second-rate technological capabilities. Finally, she could have used some of the revenue to ease the pain of transition from a nineteenth-century industrial system to a more modern one. But she chose to do none of these things. She chose to make herself look good in the short run. She chose to squander the great wealth of oil on her vanity and for this she, far more than the Arabs or Nigerians, will come to be remembered. They had fewer options. Mrs. Thatcher had plenty and she blew it.

Oil-rich countries face the test of abundance, which can be no less demanding than the test of poverty. The constructive use of oil wealth requires great wisdom, and few countries have it. Britain was given a great inheritance in the form of substantial oil reserves. The country already faced a significant economic challenge, competing in an increasingly difficult world, and it could have used the oil money to increase its potential. Instead, it consumed its savings. It had the option to build its future, but under a supposedly conservative government it permitted the decay of its industrial capacity and weakened its long-term potential. ■

BUSTING FORTUNE TELLERS

A Modern Persecution

by Ted Schultz

MACINTOSH ILLUSTRATION BY JAY KINNEY

For David and Cheryl Nicoletti, it was a weird scene.

In the cozily furnished parlor of a retirement community apartment, the young, clean-cut couple received guidance from an elderly woman astrologer. Laid out before the intent occultist were their horoscopes, inscribed circles crisscrossed with diagrammatic geometries and arcane symbols. As she spoke of such matters as subtle energies, planetary influences, and spirits entering the bodies of infants, the wholesome couple squirmed. The mystic counsel seemed additionally bizarre emanating from what otherwise appeared to be a sweet little old lady with a drawl and down-home mannerisms. For the ill-at-ease, uncomprehending Mr. and Mrs. Nicoletti, it seemed like a scene out of *Rosemary's Baby.* But for the 56-year-old Reverend Shirley Sunderbruch, it was business as usual.

Not to imply that Shirley was insincere. She'd devoted years of her adult life to the study of the Bible, astrology, and numerology. She'd achieved a modest status in her chosen profession, lecturing occasionally, being interviewed on the radio. In fact, for the past eleven years she'd earned her sole livelihood as a spiritual counselor to every type of client, including the well-known San Francisco Bay Area athletes who had been coming to her lately.

So Shirley hadn't been surprised when she'd received Cheryl Nicoletti's call. Shirley could have been recommended by any of hundreds of satisfied clients, or Cheryl might even have seen Shirley's advertisement under "Astrologers" in the San Jose, California, Yellow Pages. Shirley had explained her fees over the phone — $10 in advance, $63 more at the time of the reading. All that had been worked out in the preceding week. Slightly later than the appointed time, Cheryl had arrived with her husband, David, in tow.

Shirley would later recall that their charts were oddly incompatible, in a manner different from any husband and wife's that she'd studied before. The couple also seemed strangely disinterested. Nonetheless, they'd come seeking advice about their unsuccessful attempts to have a baby, and it was Shirley's job to help. She counselled influences favorable to conception in July. They were anxious about the child's sex. Shirley assured them that it would most likely be the girl they hoped for. She advised them on

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Though our publications have never had a kind word to say about astrology and such, I share the view in this article that if fortune tellers are liable to arrest and indictment, what are all those economists doing walking the streets? They charge more, deliver less, and are arrogant to boot. So long as paying for fortune telling, like paying for psychology or paying for dance lessons or paying for corporate stock, goes on between consenting adults, where is the crime? Get rid of these obnoxious laws.

Ted Schultz is a graphic designer — he's been working with us for eight months — and a latter-day Fortean in his spare time, researching anomalous phenomena. Makes me wonder how many other important stories unreported in the media are simmering behind the eyebrows of staff here, or staff where you are. —*Stewart Brand*

matters of finance and future employment, as well as on the esoteric aspects of soul migration and God's divine plan. As was her custom, she taped the entire interview as a permanent record for the clients.

She wasn't the only one taping.

After 40 minutes, the session was interrupted by a loud knock on the door. This was surprising, because Shirley lived in The Villages, a security retirement community with a front gate and intercom-restricted entry. Shirley opened the door a crack, then closed it again. Outside were four heavily armed men in police uniforms. Before she could turn to call for her husband, the door burst violently inward. Shirley was slammed against a nearby chair, injuring her shoulder and arm. The couple she had spent the last 40 minutes quietly counselling jumped to their feet barking commands. The two, heavily wired with radio surveillance and taping equipment, were no longer the befuddled Mr. and Mrs. Nicoletti, but undercover officers Galea and Babineau of the San Jose Vice Squad. Their elaborate entrapment had paid off. They'd nailed themselves a fortune teller.

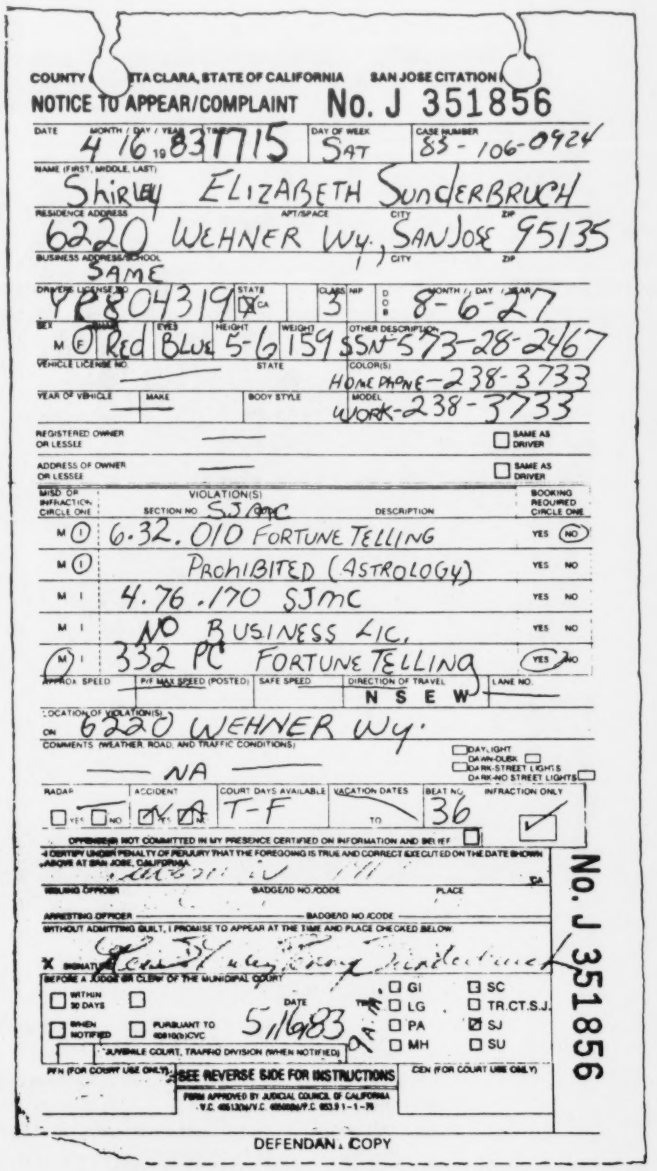
Shirley's husband, Frank, emerged from the back of the apartment just in time to see his 56-year-old wife handcuffed and shoved into a chair. The six police officers were grabbing every occult text and astrological file they could find. The police report would list among the evidence fifteen astrology books, nine file folders containing charts and miscellaneous papers, and Shirley's tape recorder. Officer Cheryl "Nicoletti" Babineau was especially belligerent. Despite the five-man backup, this was her case and her arrest. She had set it up, starting with the phone call and appointment, and she was eager to see the Reverend Sunderbruch put away. According to Mr. Sunderbruch, a California state licensed private investigator, she threatened to "throw [Shirley] in the Elmwood Jail and you'll stay there until Monday or longer!" She instructed Officer Morris, "Book her and we'll take her down!"

But Frank Sunderbruch intervened, pointing out that his frail wife might not survive a jailhouse ordeal, what with her heart and respiratory problems. He would guarantee that Shirley would appear at the station for proper booking. And could the officers please remove the handcuffs? His wife's hands were turning blue.

On April 16, 1983, the Reverend Shirley Elizabeth Sunderbruch, ordained minister of the Church of Divine Gospel Ministry and faculty advisor for the International College of Astrology, was arrested and cited for violations of San Jose Municipal Code Sections 6.32.010, *Fortune Telling,* and 4.76.170, *Operating a Business Without a License,* and for California Penal Code Section 332, *Fortune Telling.* Shortly thereafter she was fingerprinted, mugshot, and booked for her crimes. Her business of eleven years would be ruined, she would be evicted from her apartment at The Villages, and she would have to wait almost a year for her case to come to trial.

A few days later a letter to the editor of the *San Jose Mercury* complained, "I was disgusted when I read about the arrest of a woman in San Jose for 'fortune telling' because she gave two undercover officers an astrological reading . . . Everyone on this street has been robbed and/or physically abused this year . . . The police haven't caught the criminals. Our local law enforcement officers were too busy harassing some little old lady casting horoscopes. It seems to me the police priorities are out of whack."

The trial, plagued through the ensuing year by stop-and-start delays, might be considered a curious spectacle of modern jurisprudence if only it were unique. But it's not. The case of San Jose vs. Shirley Sunderbruch is essentially no different from numerous little-known cases tried frequently in municipal courts across the United States, and, less frequently, in state-level courts as well. Though there exists no legal catalog of cases tried at the municipal level, and thus no way to access and analyze local justice proceedings nationwide, it is a fact that the lawbooks of most municipalities contain anti-fortune telling ordinances. Forty-seven


COUNTY OF SANTA CLARA, STATE OF CALIFORNIA SAN JOSE CITATION

NOTICE TO APPEAR/COMPLAINT No. J 351856

DATE 4/16/1983 TIME 1715 DAY OF WEEK SAT CASE NUMBER 83-106-0924

NAME (FIRST, MIDDLE, LAST) Shirley ELIZABETH SunderBRUCH

RESIDENCE ADDRESS 6220 WEHNER Wy. APT/SPACE CITY SANJOSE ZIP 95135

BUSINESS ADDRESS/SCHOOL SAME CITY ZIP

DRIVER LICENSE NO. YR804319 STATE CA CLASS 3 M/F D.O.B. MONTH/DAY/YEAR 8-6-27

SEX M RACE E EYES Red HAIR Blue HEIGHT 5-6 WEIGHT 159 OTHER DESCRIPTIVE $SN 573-28-2467

VEHICLE LICENSE NO. STATE COLOR(S) HOME PHONE-238-3733

YEAR OF VEHICLE MAKE BODY STYLE MODEL WORK-238-3733

REGISTERED OWNER OR LESSEE ☐ SAME AS DRIVER

ADDRESS OF OWNER OR LESSEE ☐ SAME AS DRIVER

MISD. OR INFRACTION CIRCLE ONE	VIOLATION(S) SECTION NO. SJMC	DESCRIPTION	BOOKING REQUIRED CIRCLE ONE
M (I)	6.32.010	FORTUNE TELLING	YES (NO)
M (I)		PROHIBITED (ASTROLOGY)	YES NO
M I	4.76.170 SJMC		YES NO
M I	NO	BUSINESS LIC.	YES NO
(M) I	332 PC	FORTUNE TELLING	(YES) NO

APPROX. SPEED P/F MAX SPEED (POSTED) SAFE SPEED DIRECTION OF TRAVEL N S E W LANE NO.

LOCATION OF VIOLATION(S) ON 6220 WEHNER Wy.

COMMENTS (WEATHER, ROAD, AND TRAFFIC CONDITIONS) NA ☐ DAY, LIGHT ☐ DAWN-DUSK ☐ DARK-STREET LIGHTS ☐ DARK-NO STREET LIGHTS

RADAR ☐ YES ☐ NO ACCIDENT ☐ YES ☐ NO COURT DAYS AVAILABLE T-F VACATION DATES TO BEAT NO. 36 INFRACTION ONLY ✓

OFFENSE(S) NOT COMMITTED IN MY PRESENCE CERTIFIED ON INFORMATION AND BELIEF ☐

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT AND EXECUTED ON THE DATE SHOWN ABOVE AT SAN JOSE, CALIFORNIA CA

ISSUING OFFICER BADGE/ID NO./CODE PLACE

ARRESTING OFFICER BADGE/ID NO./CODE

WITHOUT ADMITTING GUILT, I PROMISE TO APPEAR AT THE TIME AND PLACE CHECKED BELOW.

X SIGNATURE

BEFORE A JUDGE OR CLERK OF THE MUNICIPAL COURT

☐ WITHIN 30 DAYS ☐ WHEN NOTIFIED ☐ PURSUANT TO 40508(b) VC DATE 5/16/83 TIME 9 A.M. ☐ GI ☐ LG ☐ PA ☐ MH ☐ SC ☐ TR.CT.S.J. ☑ SJ ☐ SU

☐ JUVENILE COURT, TRAFFIC DIVISION (WHEN NOTIFIED)

PFN (FOR COURT USE ONLY) SEE REVERSE SIDE FOR INSTRUCTIONS CEN (FOR COURT USE ONLY)

FORM APPROVED BY JUDICIAL COUNCIL OF CALIFORNIA V.C. 40513(b)/V.C. 40500(d)/P.C. 853.5 1-1-78

DEFENDANT COPY

No. J 351856

Looks like a traffic ticket, but . . .

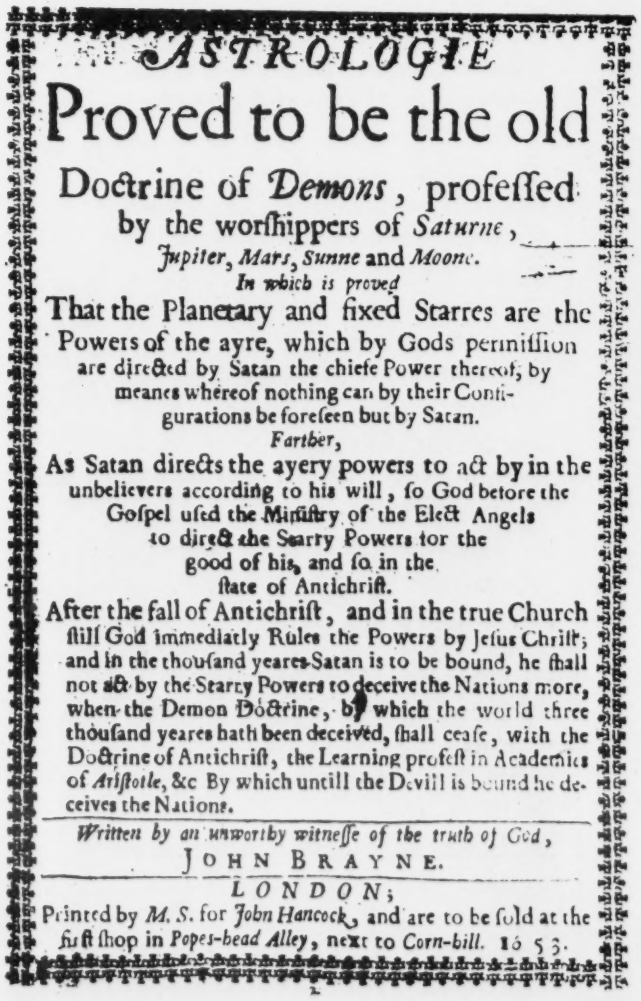
The citation served to Shirley Sunderbruch following her entrapment arrest in the parlor of the retirement community apartment where she interpreted the horoscopes of two undercover vice police.

(Below) The Reverend Shirley Sunderbruch, astrologer, numerologist, and student of the Bible.

SHIRLEY SUNDERBRUCH

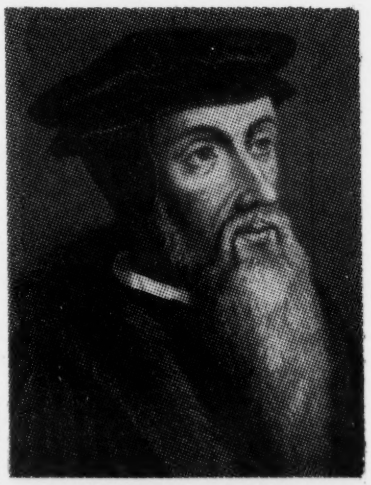
MAN, MYTH & MAGIC

The modern legal prejudice against occultists traces its origins back down an unbroken historical chain to a time when disagreement with prevailing Christian ideology constituted the crime of heresy, an offense punishable by death. (Above) An 18th century engraving depicts the mass burning of sorcerers and witches, a common spectacle in the 16th and 17th centuries, when over 30,000 people were sacrificed to the hysteria in a 150-year period. (Below) A typical pamphlet of the 17th century denouncing astrology. (Right, top) John Calvin, the ruthless Protestant witch-hunter of the 1500s. (Right, bottom) Matthew Hopkins, England's 17th-century Witchfinder General, claimed to have the Devil's list of all the witches in England.



THE ASTROLOGIE
Proved to be the old
Doctrine of *Demons*, professed
by the worshippers of *Saturne*,
Jupiter, *Mars*, *Sunne* and *Moone*.
In which is proved
That the Planetary and fixed Starres are the Powers of the ayre, which by Gods permission are directed by Satan the chiefe Power thereof, by meanes whereof nothing can by their Configurations be foreseen but by Satan.
Farther,
As Satan directs the ayery powers to act by in the unbelievers according to his will, so God before the Gospel used the Ministry of the Elect Angels to direct the Starry Powers for the good of his, and so in the state of Antichrist.
After the fall of Antichrist, and in the true Church still God immediatly Rules the Powers by Jesus Christ; and in the thousand yeares Satan is to be bound, he shall not act by the Starry Powers to deceive the Nations more, when the Demon Doctrine, by which the world three thousand yeares hath been deceived, shall cease, with the Doctrine of Antichrist, the Learning profest in Academies of *Aristotle*, &c By which untill the Devill is bound he deceives the Nations.
Written by an unworthy witnesse of the truth of God,
JOHN BRAYNE.
LONDON;
Printed by *M. S.* for *John Hancock*, and are to be sold at the first shop in *Popes-head Alley*, next to *Corn-hill*. 1653.

UNIVERSITY OF CALIFORNIA BERKELEY LIBRARY



MAN, MYTH & MAGIC

out of the 50 states regulate fortune telling in some way. Current cases that we do know about indicate an ongoing random assault on this small and vulnerable minority.

In 1976 a California appellate court agreed to hear the appeal of Zsuzsanna Bartha, a witch and a member of the pagan Wicca religion. She had been convicted of giving a Tarot card reading to an undercover officer. The higher court upheld the conviction, deciding that her religious freedoms did not include doing Tarot readings *for pay*. Unfortunately for offenders like Shirley Sunderbruch, this case has since been used as a precedent for denying further fortune telling appeals based on freedom of religion.

Shirley Sunderbruch was the victim of an anonymous complaint. A sympathetic neighbor later relayed to Shirley that she had overheard two other Villages residents chuckling about the tip they had called in to the vice squad. They were offended by some of Shirley's clientele, in particular the big, black athletes. Astrologer Jayj Jacobs, part of the legal committee backing Shirley's defense, called the arrest "racist and classist."

Snitching by neighbors with grudges fuels the enforcement of fortune telling ordinances. The broad applicability of the laws invites private citizens like the former roommate of a Pleasant Hill, California, astrologer to use police as their means of revenge. Disgruntled over past housecleaning disagreements, she tipped off police to vent her bitterness. In that case the astrologer took the path of least resistance and left town.

An anonymous complaint tipped off police to Angela Marks, 36, of Enfield, Connecticut. She was arrested in December 1983 after reading the palm of an undercover officer.

In February 1984 an astrologer and single mother of two in Southern California wrote to Assemblyman Landcaster of the 62nd Assembly District to inquire about astrology laws in her area. Instead of the helpful public-servant response she expected, she got a "cease and desist" warning from her

Snitching by neighbors with grudges fuels the enforcement of fortune telling ordinances. The broad applicability of the laws invites private citizens like the former roommate of a Pleasant Hill, California, astrologer to use police as their means of revenge. Disgruntled over past housecleaning disagreements, she tipped off police to vent her bitterness.

local director of community development. He had been tipped off by the assemblyman.

Christian fundamentalism is behind many recent fortune telling arrests. Milwaukee's "Reverend" Roper directs his fundamentalist fervor toward battling the legions of Satan disguised as occult practitioners. In 1983 he played no favorites, pushing the arrests of an astrologer, a numerologist, and a Tarot reader. Then Christian zealots sicced police on a psychic fair held at the Mercury Limited occult bookstore, bagging six occult offenders. When subsequent psychic events were moved to the Milwaukee suburb of West Allis, the latter-day witch-hunters gave chase, almost pushing through an anti-fortune telling ordinance there as well.

Adult education classes with an occult bent have been targeted by the ubiquitous Christian crusaders. They managed to get astrology courses dropped from the non-credit curriculum of the junior college in Waukegan, Illinois, and in 1983 they nearly succeeded in a similar effort at Illinois' Elgin Community College.

In January of this year the Reverend Paul Perkins of the Jesus Name Apostolic Faith Church in Monticello, Kentucky, denounced psychic reader Mrs. Suzan Reboulet as serving "a Satanic source." Another local pastor, Noble A. Cobb of the Elk Spring Valley Baptist Church, quoted the Biblical proclamation, "Thou shalt not suffer a witch to live."

Even the Vatican, hardly fundamentalist, has gotten into the act. This February, Vatican theologian Reverend Gino Concetti delivered the official Church position: "The horoscope, like astrology, palm reading, card reading, and other things of this sort, is against the religious principles of the Bible. The future of every human being . . . only God knows."

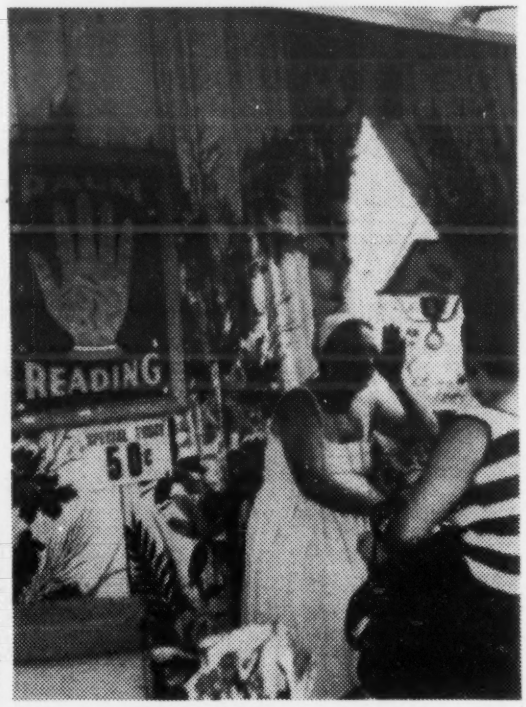
In June 1983 the American Civil Liberties Union came to the rescue of astrologer Adele Levy and self-described "gypsy fortune teller" Frank Johns of Chicago. Both had been arrested by police who were enforcing an old ordinance that prohibits signs advertising fortune telling businesses. In this case the ACLU managed to have the ordinance repealed and even to have Levy and Johns reimbursed by the city for legal fees and lost business.

In Chicago the law prohibited the advertising but not the practice of fortune telling. In many places fortune telling is legal but must be licensed. This may sound tolerant, but consider the case of Cindy Delee, a professional astrologer in Millbrae, California. In 1977 Millbrae required occultists to have a "soothsayer's license," a law Cindy learned about only after she received a bill from the city clerk for $14,615, based on the rate of $115 a day. With persistence and diplomacy, Cindy was able to convince the town council to except astrologers from the requirement and to charge her a reasonable licensing fee. Of course this does not help Millbrae's palmists, crystal gazers, sand readers, or clairvoyants, also named in the law.

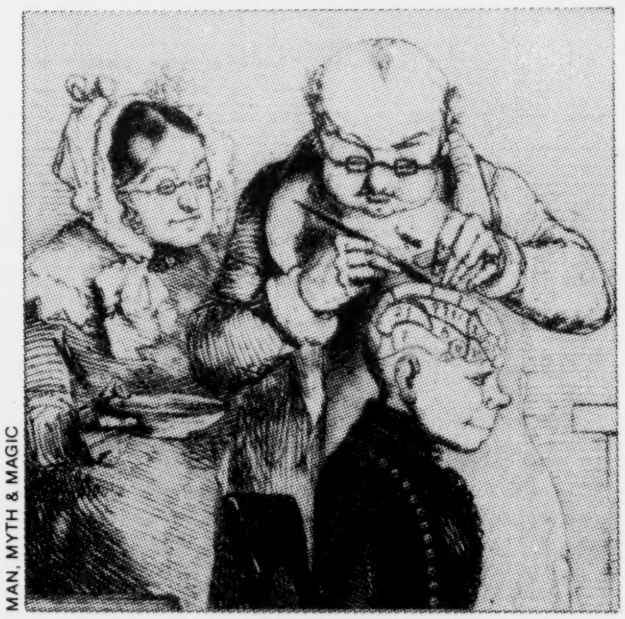
With quirky legalistic logic, many communities prefer the tactic of exorbitant licensing fees to outright prohibition. Anderson County, South Carolina, charges $10,000 a year, enforced by a $10,000 fine and two years in prison. In comparison, Arkansas seems reasonable at $100 a year for a license, but don't forget to read the fine print — an additional fortune telling *tax* of $100 per week. Mississippi is a relative bargain at $2,000 a year.

There are other forms of punishment besides legal penalties, and these extralegal social pressures can be harsh. During 1981-82, 32-year-old high school art teacher Marianne Hoffman experienced such pressures on her job in the small town of Aurora, Ohio. After the *Cleveland Plain Dealer* ran a story about Hoffman's astrological paintings, the school's principal and other members of the faculty and staff, some of them zealous "born-again" Christians, subjected her to "a whole year of torture." Then the principal declined to renew her contract, offering only the explanation, "You are detrimental to the students." Even members of the teacher's union supported the dismissal. She won the dispute, but decided against returning to work in such a hostile atmosphere.

Originating from a number of distinct sources, hostility towards various occult activities obviously exists in our culture today. This hostility helps keep the laws on the books, despite the injustice and archaism betrayed in their quaint wording and outmoded prejudices. It is, for example, illegal either to practice psychology



MAN, MYTH & MAGIC



MAN, MYTH & MAGIC

Most fortune telling statutes include a long list of divinatory practices that are officially forbidden. (Above, left) Palmistry, past: a 16th century Italian painting by Peruzzi depicts a palmist practicing his already ancient craft. (Above, right) Palmistry present: still persecuted like her historical predecessors, the modern gypsy palmist often locates on the outskirts of town, outside the boundaries of municipal fortune telling legislation. (Left) Phrenology, the craft of character-reading by the study of the shape and features of the human head, though rarely practiced today, is still forbidden by obsolete laws.

or to raise the dead in San Francisco. The law reads, in part:

> It shall be unlawful . . . to tell fortunes, to practice phrenology, to find or restore lost or stolen property, to locate oil wells, gold or silver or other ore or metal or natural product, to restore lost love or friendship or affection, to unite or procure lovers, husbands, wives, lost relatives or friends, for or without pay; by means of occult or psychic powers, faculties or forces, clairvoyance, psychology, psychometry, spirits mediumship, seership, prophecy, astrology, palmistry, necromancy, or other crafty science, cards, talismans, charms, potions, magnetism or magnetized articles or substances, Oriental mysteries or magic of any kind or nature; . . . .

All of these ordinances have been copied from one another, tracing a lineage 450 years back to the reign of Henry VIII in England. To deal with increasing problems from vagrants, travelling entertainers like jugglers and mummers (mimes), and the fairly recent population of "Egyptians" (gypsies), Henry decreed a number of laws, including the Egyptian Act of 1530 and the Vagrancy Act of 1531.

Though vagrancy laws in Britain went back to 1388, the first to mention fortune telling was "an act concernying outlandysshe people callynge themselfes Egypsyans." It banished all Egyptians from the realm, charging that they "used greate subtyll and crafty meanes to deceyve the people, beryng them in hande, that they by Palmestre coulde telle menne and womens fortunes" and that they were guilty of "many and haynous felonyes and robberies." The Vagrancy Act of 1531 spelled out its subject in detail, defining many types of vagrants. Among them were:

> . . . all Proctours & Pardoners goyng about in any contrey or contrayes without suffycyent aucthoryte, & all ydell personnes goying aboute in contreys or abydyng in any Cytie Buroughe or Towne, some of them usyng dyvers & subtyle craftye & unlawfull games & playes & some of them feynyng themselfes to have knowledge in Physyke, Physnamye[1], Palmestrye, or other craftye scyences wherby they beare the people in hande, that they can tell theire destenyes deceases & fortunes & suche other lyke fantasticall ymagenacions to the greate deceypte of the Kings Subjects . . .

In 1541, Henry VIII enacted another law against persons using

> . . . any Invocacons or conjuracons of Sprites wichecraftes enchauntments or sorceries, to thentent to get or fynde money or treasure, or to waste consume or destroy any persone in his bodie membres or goodes, or to provoke any persone to unlawfull love, or for any other unlawfull intente or purpose . . .

Those found guilty of breaking this law were considered felons punishable by death.

It was these three laws, especially the Vagrancy Act, that provided the phraseology for fortune telling laws still in effect and still enforced in most states and towns in the U.S. today. New Jersey law, for instance, outlaws "any person who uses or pretends to use or have any skill in physiognomy, palmistry or like crafty science, or pretends to tell destinies or fortunes." Michigan's law reads, "Any person who shall pretend by or through means of palmistry, phrenology, clairvoyancy, astrology or fortune telling by cards or other devices for money or gain, to enable anyone to get or recover lost or stolen property . . . shall be guilty of a misdemeanor." Indiana cites those who "pretend, for money or gain, to predict future events, by cards, tokens, trances, the inspection of the hands of any person, mind reading, so called, or by consulting the movements of the heavenly bodies," and those who claim power "to get or recover lost or stolen property."

Maine outlaws "persons using

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1. "Physiognomy ['Physnamye'] was a method of prediction founded on an examination of the lineaments, and the color and appearance of the veins . . ." —C.J. Ribton-Turner, *A History of Vagrants and Vagrancy and Beggars and Begging* (London: Chapman and Hall, Ltd., 1887).

Gypsies are still the object of legislation, as they have been in the Anglo world ever since Henry VIII targeted them as an ethnic group. Section 607 of the Texas Penal Code specifies as criminals "all companies of gypsies, who, in whole or in part, maintain themselves by telling fortunes."

any subtle craft, jugglery or for the sake of gain pretending to have knowledge in physiognomy, palmistry, to tell destinies or fortunes, or to discover lost or stolen goods." It goes on to condemn "fiddlers, common pipers, runaways, drunkards, nightwalkers, railers, brawlers and pilferers." The Maine law, still enforced today, was copied in 1788 from a Massachusetts statute which, in turn, was copied from the British Vagrancy Act of 1531.

Fundamentalist minister Donnie Coffey of Monticello, Kentucky, helped block the licensing of a psychic reader with the words, "This practice is entirely against the Bible and should not be tolerated in any community." He voiced a sentiment echoing forward from 1554 when King Phillip and Queen Mary updated the Egyptian Act, condemning those "using their olde accustomed develishe and noughty practises and devises, with such abhominable lyving as is not in any Christian Realme to be permitted named or knowen."

Gypsies are still the object of legislation, as they have been in the Anglo world ever since Henry VIII targeted them as an ethnic group. Section 607 of the Texas Penal Code specifies as criminals "all companies of gypsies, who, in whole or in part, maintain themselves by telling fortunes." Virginia law states, "It shall be unlawful for any company of gypsies or other strolling company of persons to receive compensation or reward for pretending to tell fortunes or to practice any so called magic art."

Paranoia of gypsies is at the root of the law enforcement prejudice against fortune tellers. Testifying before an ill-fated 1974 California Senate committee considering the licensing of astrologers, Beverly Hills Senior Assistant City Attorney Jack Allen presented the vice-squad perspective.

> [Gypsies] use the arts of Tarot cards, . . . the crystal ball . . . palmistry. But as long as they are prohibited from using these forms, they will look for any way to get a victim into their business. . . . If they can [use] astrology, they will. . . . We have been able to determine through extensive studies and consultations with experts in the field [that when] you find a gypsy fortune teller you find what in our society generally we consider a crook, although to the gypsy there is nothing crooked . . . about taking a victim, because in their thought anybody that is so avaricious or stupid to be swindled deserves it . . . There was a case in Oakland [California] recently where $85,000 was involved and the swindles go on and on.

Mr. Allen's testimony described gypsies as a nomadic, closed-off group of people who live by swindling local populations — matching closely the 16th century English concern about Egyptians. In San Jose, where Shirley Sunderbruch was arrested, Sgt. Phil Taves of the vice squad called the fortune telling scene a cutthroat game, where fortune tellers regularly "snitch on each other and accuse each other of all kinds of dastardly crimes." Sgt. Jose Alcantra of the Los Angeles Bunco Squad describes fortune telling swindlers as "waiting for the desperate person who can be milked out of his life savings."[2]

Certainly there are swindlers in the fortune telling business, just as there are in all businesses. Is blanket prohibition the solution? Those occultists who consider themselves professionals argue that such legislation is discriminatory, and that the penalty to the taxpayers is wasted dollars for court costs.

In the case of the Reverend Shirley Elizabeth Sunderbruch, the wastage officially began on

2. Quoted by Harry Farrell, "The Spirits Are Calmed in the Fortune Telling Trade," *San Jose Mercury-News,* August 22, 1983.

All Chinese restaurants in the city of San Jose are equally guilty of violating the ordinance against fortune telling, since they conduct the business of fortune telling via distribution of fortune cookies.

March 5, 1984. The trial had been delayed almost a year, lurching through a series of reschedulings. As the frustrations increased, Shirley's luck decreased. Her landlord at The Villages apparently arrived at his own verdict and evicted her "because of the discredit that you bring upon the community." She could not practice her sole profession of eleven years, even in nearby towns where it might have been legal, because all her tools had been taken into evidence. She and her husband found that subsequent living arrangements were too expensive for their reduced income, and after sticking it out for as long as they could they had to leave the area and the clientele Shirley had worked so hard to assemble.

Peter Stromer, the Sunderbruchs' attorney, also happened to have successfully defended Kirby Hensley, founder of the Universal Life Church, all the way to the U.S. Supreme Court, basing his defense on the constitutionally guaranteed freedom of religion. Stromer was a good choice for an astrology case, but the Sunderbruchs couldn't have afforded his fee for a full-blown test case if it hadn't been for the American Federation of Astrologers Network (AFAN). A "new wave" of radicalized astrologers, AFAN is a splinter group of the dinosaurian American Federation of Astrologers founded in 1938. AFAN scraped together the money for Shirley's defense. In the words of steering committee member Jim Lewis, "One wonders if some of the [past] cases might have come out better had there been an adequate astrological organization to back astrologers under siege by police and hostile social forces. If we do not make a successful stand now, it will quickly be too late."

Stromer's three witnesses were all astrologers, who testified at length as to the validity and effectiveness of their craft. In addition to the testimony of his expert witnesses, Stromer argued the gamut of conceivable defenses — discrimination, freedom of religion, commercial free speech, and the vagueness and overbreadth of the statute. "Carrying the ordinance to its ultimate logical conclusion," he pointed out, "must the city of San Jose bring criminal charges against the city's largest newspaper, the *San Jose Mercury,* since [it] is daily conducting the business of astrology by printing a daily astrological horoscope? All Chinese restaurants in the city of San Jose are equally guilty of violating the ordinance against fortune telling since they conduct . . . the business of fortune telling via distribution of fortune cookies! An economist must therefore be careful of forecasting the behavior of the national economy in San Jose, for he is committing 'prophecy.'"

City Attorney Robert Cimino argued simply that Shirley had broken a law, and that the law was constitutionally valid. It was a short but tight argument that few judges would want to decide against. If he acquitted Shirley, Judge Edward J. Nelson would be sticking his neck out and declaring San Jose's fortune telling law invalid.

As this article goes to press (May, 1984), Judge Nelson is still deliberating. Shirley Sunderbruch and AFAN know their chances are slim. Though Stromer says, "I like to go into each case expecting to win," he's laid groundwork for an appeal. A successful appeal could change the laws statewide. "As a former sixties radical," says Jayj Jacobs, head of the AFAN Legal Information Committee, "I'm pretty excited by it all."

If Shirley Sunderbruch's is a test case, then it's a test against a legal tradition that has endured virtually unchallenged for over 450 years. It might also be viewed as a test of our social ethic. Have we changed at all in 20 generations — or has the language changed more than the concepts it's used to express? Can our capacity for tolerance increase? If in one generation "psychology" is a swindle and in another it is valid and true, can we really feel safe relegating to legislators and police the power to decide upon the inherent *value* of any human belief, and to enforce that decision? ■

For updated information on the Sunderbruch case and similar cases nationwide, send $1 for a current newsletter to:
AFA Network
8306 Wilshire Blvd. #537
Beverly Hills, CA 90211.

MAN, MYTH & MAGIC

Evangeline Adams, J.P. Morgan's astrologer, won a victory against fortune telling laws after being found "not guilty" following her entrapment arrest in New York in 1914. Subsequent attempts to use her case as a legal precedent have failed. Ironically, Shirley Sunderbruch won the Evangeline Adams Astrologer of the Year Award in 1975.

Good Samaritan Crimes

by Delancey Street

GRANDVILLE

Delancey Street is the renowned San Francisco convict- and addict-rehabilitation operation — renowned because it works. A while back I was in a seminar with Delancey's head, John Maher, and asked him about Good Samaritan crimes, where the victim's helpfulness is turned into the criminal's weapon. I said these crimes violate much more than the victim's property or person — they are the kind of crime that, as JoAnne Greenburg once wrote, make the victim doubt the sanity of God.

Maher said, "Yeah. They're in low repute on the street. They deserve to be. Maybe we can help them be lower still by listing the kinds. I'll get some of the guys on it." List follows. —*Stewart Brand*

Our folks list the following crimes that result from a citizen's kindness:

1. The most common turnoff is the panhandler who claims to need a ticket home, or to represent a charity. Later, the donor sees the same person again and realizes this is a ripoff.

2. Large-scale charity balls and benefits which divert all of their revenue to cover overhead costs. When such a scam is exposed, volunteer workers and donors may be inclined to freeze on legitimate charities.

3. The broken-down motorist ploy, in which a citizen who stops to help an apparently stranded or injured person is then robbed or raped. (In a variation on this, a phony police officer "arrests" the con artist for narcotics possession and forces the helpful bystander to bribe him.)

4. The distress phone call routine, where a person asks to use a phone and then gains access to a home for purposes of robbery.

5. Persons posing as sick or drunk who lure Good Samaritans into taking them to fictitious addresses and then rob them.

6. Drug addicts who call on doctors for emergency visits and then rob them.

7. Persons who pose as FBI agents or local police to persuade citizens to assist them in robberies of neighbors. Many persons, shown a badge, will give access to stores and homes in order to assist law enforcement.

8. A feigned fainting spell or seizure in a store: as bystanders try to help, confederates loot the store or cash registers.

9. Setting citizens up to intervene in what appears to be a mugging or an assault and then suing them.

10. Dead Man's Drop: the delivery of packages — particularly religious items and gifts — to families with the claim that a deceased family member ordered them. A variation of this ploy is to deliver specious C.O.D. packages to neighbors while a family is at a funeral.

11. Package drop: asking people to accept C.O.D. packages for neighbors who are away.

12. Emergency check routine: a person posing as a rape or robbery victim stumbles into a place of business crying about a lost sum of money that is needed immediately. An assistant, feigning horrified sympathy, writes a phony check to help the "victim" out; the shaken shopkeeper cashes it.

13. Persons posing as police ask a person to cash a sizable check or, in some cases, to withdraw a large sum of money from the bank in order to assist in an investigation. ■

BAD SEEDS

by Charles Pappas

illustrated by Melinda Gebbie

ON THE NIGHT OF JUNE 30, 1976, a squat, middle-aged man patiently sat in a popular-priced restaurant in LaCrosse, Wisconsin. He had a conspicuous tan, wore the kind of clothes associated with singles bars, and had a southern drawl. All night long he puttered with his drink, but a towel wrapped about it prevented his leaving fingerprints. This means that in his most blasé moments he could see my friend dead.

Eventually the restaurant emptied. Only three people remained: the slayer; Alex Dressler, the bartender, age 24; and Ruth Lewis, his friend, age 20. Dressler withdrew to an anteroom. Ruth sat elbow to elbow with *him.* He pulled out a handgun and coolly pumped a bullet into the posterior of her skull. Seconds later, he shot Alex.

I do not believe in God and yet I found myself praying Ruth would rise to heaven like a balloon. Ruth and I were friends of the sort who materialize in and out of each other's life infrequently, needing no more than a phone conversation or letter to keep on keel. She stays with me in a way no one else has, as another conscience.

Murder has a spiderweb effect. Even those on its fringe acknowledge helplessness and despair. Time truncates and swells arhythmically. Legs harden into an arthritic stiffness. Attention spans melt into air. At any time one may be overtaken by a choking, strangling sensation. But worst of all, one hears others recite reassurances that the world will go on. And that is the tragedy: if things were right, the earth's orbit would slacken, music would dim, and light darken.

After eyeing Ruth's name in a headline, I sat down to dinner and supped on chicken. My family talked about politics and the weather. So did I. A paradox: one freezes solid and simultaneously disintegrates.

I slept often and long the following months. The murder tunnelled into my dreams nightly. In those dreams I looked at absolute nothingness and understood it in a way not possible while awake. The dreams came like dry heaves; I woke out of them scrunched in pain.

Ruth's grave lies 50 yards from my house. I remember sitting on the front porch waiting for a ride to the funeral when I heard machines gouging open a hole for her. The New Year's Eve after Ruth's death I listened to her former best friend work herself into a froth about Ruth's killer, describing in luscious detail how she would torture him, and with what surgical instruments.

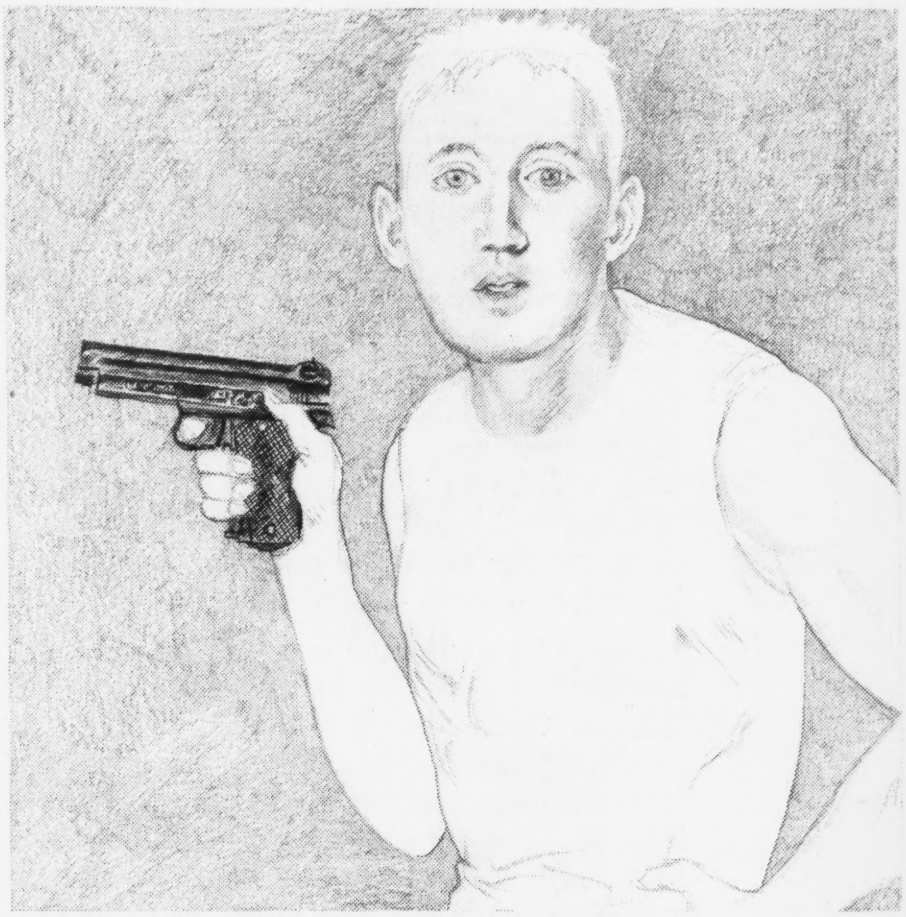
I have to admit that I postponed publishing this true story about a year, finally realizing that what made me uncomfortable was its rough-edged subject, not any editorial rough edges. Charles Pappas' last CQ article was "The Pure Gold Baby," a similarly outraged chronicle of a monstrous 14-year-old (in CQ Spring '82). The monstrous children in this story are slightly older and a lot more dangerous. Pappas believes that they're responsible for their own evil. I'm still figuring out how I feel. What do you think?
—Art Kleiner

It took a year before I realized that Ruth's death was indeed final and that the numb horror I had felt since then would linger indefinitely. Colors had lost their edge: canary yellow looked dirty white, deep green was nearly black. Fragrances wilted: decanters of Bay Rum and snifters of brandy both smelled like tepid water.

Anniversaries of her death came and left. On those occasions I put roses on her gravestone at one or two in the morning, because when there is only the sound of wind and police sirens it is easy to imagine it is all unreal.

(Later I worked in a nursing home taking care, by coincidence, of Ruth's aunt, a Down's Syndrome case. I fantasized her cells were Ruth's cells, that there was a genuine link there.)

What did these rituals mean? Nothing. They were meant to deaden the shock. They formed a sheath that hid the fact that we do not have forever. The lesson I learned is: record and testify.



HER KILLER WAS NO ONE. We spawn numerous such no ones: the Squeaky Frommes, the Charles Starkweathers, the John Wayne Gacys. It is in fashion to be more interested in the murderer than the murdered. Sociologists burdened with that interest devised victimology, the proposition that many of us implore sociopathic thugs to maul, maim, or at least nick us.

Victims are an embarrassment. They're so awkward, what with the messy snags of grieving families, friends, and lovers left behind. But the killers — pardon me, desperados! outlaws! rebels! — are great fun to encapsulate. One of them reads Nietzsche, say, or turns over bags full of capitalist profits to orphanages. Perhaps he'll say catchy things. For every depraved criminal there is a sap hooked on dressing the maniac up as a Real Man who answers to nothing save his own conscience, a sleazy grifter with a heart of gold who plugs cops between the eyes one moment and helps elderly nuns cross busy intersections the next. Norman Mailer did it with Gary Gilmore and — surprise! — he did it again with Jack Abbott. Murray Kempton went and did it with the crackpot who shot John Lennon. Why, Lennon might've respected Mark Chapman, Kempton said. I think Lennon might've respected a bad aim.

Evil is a passé topic nowadays. You hear about it less in seminaries than in college dorms, especially after a screening of *Halloween* or *The Exorcist.*

Real evil is brainless. Noel Coward doesn't write its dialogue. When life runs out of sync and people run out of beliefs, what they'll turn to is antilife, the negative of that which failed them. Thus do Mailer and others like him become enchanted with evil.

What the whole mob of sociologists and psychologists and criminologists missed was that choice is as real as class and environmental factors. To talk of choice is to talk of ethics, and before you know it, you're talking about that man-upon-the-stair, evil. By the late 1960s anyone mentioning evil was looked at as if covered with scrofula from head to toe. Moral relativity was fun, but when people actually started *doing* what their favorite philosophers preached, the party was over. Believe it or not, there are lunatics galore who inflict pain because the victim is weaker than they are: watching victims squirm is as merry for them as a month in the country.

I really believe this. I worked as a house parent for delinquents and what I found did not jibe with *Boys' Town* or *Blackboard Jungle.* Our wards were emotionally stunted, totally amoral juveniles who felt that if one could be robbed or beaten up, one deserved it. They stole from and sexually molested each other. Time and again when one of them was charged with breaking and entering or something similar, the charge was rerouted back to the social service agency presiding. For the kid it was no different than winning a shopping spree in a K-Mart. Because these group home occupants were juveniles, the law (in Wisconsin) made it highly improbable that anything would ever happen to those who committed crimes.

BILL WAS SIX-FOOT-THREE, perhaps six-four, and had done a wee bit too much lysergic acid. He was a Gumby doll with a police record. To him the world was an eternal skein of inscrutable cartoons whose colors mushed together. Thoughts bobbed and skipped inside his cranium like loose basketballs.

Bill returned from a jaunt in the Wild West during my first week as a house parent. He and another ward, Calvin, had gone to liberate guns from a cupboard in Cal's parents' house. Bill reached the end of the line in the Northwest: a man told him to get in his car, so Bill did, and thus began a merry adventure with dope and the law. Upon his homecoming Bill intoned the pledge, "Bill be good. Bill be good."

I worked the shift from evening till morning and was alone with six or seven of our charges. That made me easy pickings. Bill developed a new pastime, that of twisting me into headlocks and other contortions while he laughed. (There was no reason for it, there was only nothing.) All I could do was look disinterested. Insouciance does not come easily to we of Mediterranean descent.

JOHN WAS PARTIALLY DEAF, feral and furry in appearance, bored to the point of obsession. The hearing aid we bought him stayed in its protective carton; after all, it was a drag to wear. Everything was a drag to John: having to get dressed, having to bathe more than once a month, not being able to crank his cassette player to full blast all night (he couldn't hear it without his hearing aid, but that made no dent in that hash of neural impulses which he bludgeoned with such glee), having to read anything more cryptic than a vile monthly gazette of scabrous motorcycle mamas perched in compromising positions.

You could tell John that Saudi Arabians haul icebergs as big as Kansas to use for tap water, that Owsley introduced Napoleon to psilocybin in Atlantic City, and that Jesus rode shotgun on an antediluvian starship. He'd invest in the whole bill of goods; the Oh-Wow school of history is indispensably flexible. What John would not buy was that wetting one's whistle with a fifth of scotch on a serial basis might lower brain cell potential half a watt or so.

John was not cerebral enough to bandy back and forth philosophies of right and wrong. His philosophy was easygoing: John sees, John wants, John takes. If John decided to attend the Rush concert despite his grounding, John stole the money necessary for a ticket. And what's a concert without a little dope? John was careful to buy and smoke just enough to affect that chic lobotomized look. When he at last returned home, John balked and sulked at punishment; it wasn't fair because he didn't feel guilty. Besides, he told us, I'll be dead before I'm 20 so fuck you.

John could not read above a grade school level; *Dick and Jane* was to him what Proust is, say, to undergraduates. Another failure of our ratty educational system? Not this time, sorry. John did not read because John had seen the future and therefore knew it didn't matter anymore.

John was not intrinsically a dunce; John was a self-made man. But of course: the parents must have horsewhipped the lad. No doubt they kept him on ice in an iron box devoid of sensory stimulation. They were, in fact, a decent, flustered couple whose increasing age only made their son seem more and more like a package delivered one day to the wrong house.

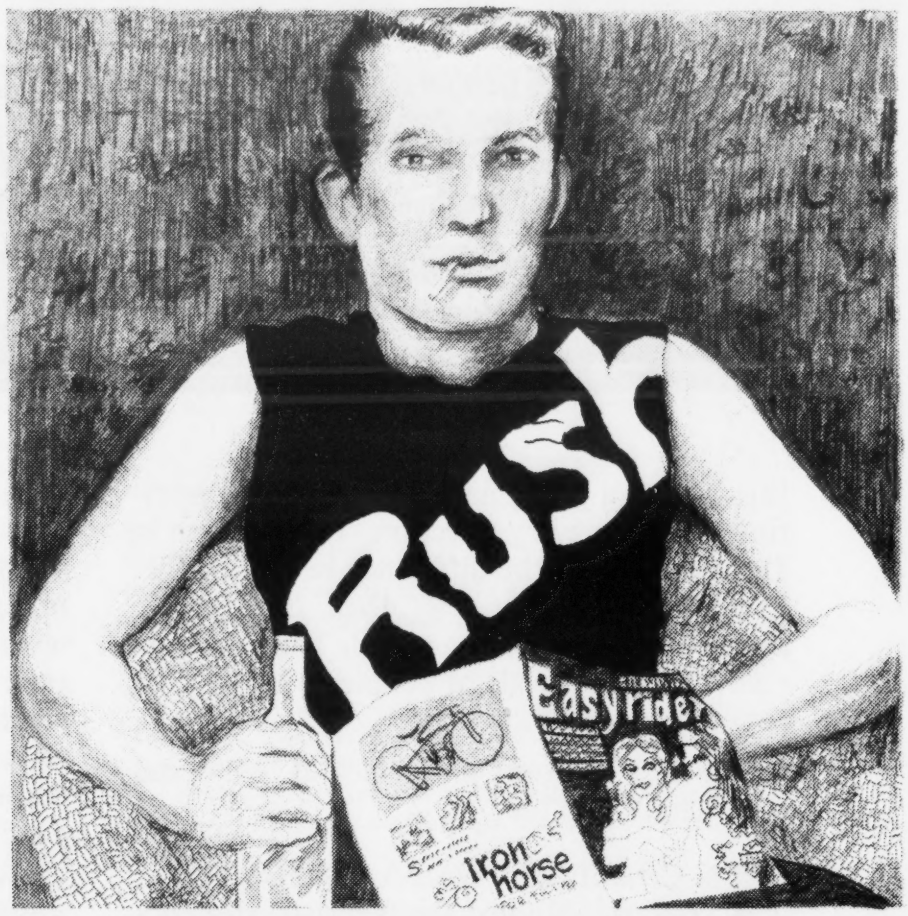
What John could do was watch TV. Cable television captured his attention span with reels of tits and ass or martial-arts hullabaloos. Protuberant nipples or crushed fibulas, that's what caught his eye.

In other ages he might have been absorbed on a farm or some other out-of-the-way place where he could work and not have to mind a world he comprehended on a level with creatures that move by brachiation. But that was unlikely in our age. As far as John was concerned, the world was begat upon his birth and was really no more than a junkyard of houses to be broken into and video games in which to inject quarters. He knew the handwriting was on the wall when it came to getting away with petty crimes; when he turned 18 the jig would be up. (I left before that happened.)

Most of the kids' misconduct was never dealt with; police steered them back to us, and we in turn cowed them by withholding their allowances. Resilient to the last, they compensated for this cash-flow lag by selling their benzedrine and dexedrine at school. If confined to their rooms, they popped out the window. They learned that if you say "fuck you" enough, you don't have to do *anything.*

DORIAN: THE *CRÉME DE LA CRÉME.* Six feet and sinewy. The kind of look in his eyes that made you want to buy a .357 magnum pronto. I went to high school with his brother, an obese and insecure boy. Dorian, by contrast, was a darksome, eerie adolescent with a predisposition for hurting people. He lived out scenes in movies, tying knives to torso and thighs in a take-off of *Taxi Driver.* In fact, when a cab driver irritated him once, Dorian apoplectically withdrew an ample blade and tried to shishkebab him.

John was not cerebral enough to bandy back and forth philosophies of right and wrong. His philosophy was easy-going: John sees, John wants, John takes.



Dorian spent a year bounding at me from corners and behind doors, executing some sort of arcane karate calisthenics. He would push me to and fro a bit just for effect, then detail how he could have torn my lungs away or snapped my spine in two. When he got down to business, Dorian ripped doors off hinges or pitched lamps through windows or socked holes in walls. If the mood took him, he tried to "flatten windpipes," i.e., throttle people.

Otherwise Dorian whiled away the hours by rounding up a miscellany of animals. Not, however, for 4-H contests and blue ribbons. He raped cats and geese and severed their necks during the act. Once he lost himself in a frothy monologue about cattle mutilations in Colorado, repeating "It's really neat, you wouldn't believe it" so often it was clear he knew he was in a room full of unbelievers. Other kids may drift off to sleep with visions of sugarplums cavorting in their heads, but Dorian's dreams burst with technicolor still-lifes of eviscerated quadrupeds, cats' heads yanked cleanly from their sockets — and women on whom he could inflict violence. My predecessor was a woman counselor who also worked alone. Dorian attempted to exercise his group organization skills by persuading the other boys to gang-rape her. But, hey, what's a little acting out?

From what we later learned, Dorian did indeed rape a girl during his stay. Ah, but even Dorian could reject stylish promiscuity; he found true love in the shape of a 13-year-old — he was 17 — whose mother put her blessing on the affair so daughter would get pregnant and out of the house. Ever the sentimentalist, Dorian hoarded his used rubbers in an empty Schlitz bottle as a reminder of his Juliet. Or, as he called her, "dumb cunt."

Dorian ought to be somewhere, anywhere. He's not because he's never quite done anything savage enough. (Qualify that. He's not been caught.) Please do not tell me about civil rights and the horrors of the asylum. The atrocities of neglected and abused rights are legion. We know that. We also know there is a large child tick-tocking away, and he might go off all over you.

He's out. We let him out. We had to; he reached his 18th year. We released him to the custody of his brother, but I drove past him a while ago and caught a split-second glimpse. He was the same, looking tough and quintessentially sociopathic.

Right before Dorian left — we kicked him out a tad ahead of schedule — an image began to coalesce in his mind. He was getting antsy; he'd seen *The Shining* one too many times and started to focus on an idea, a composition all his own. He would slit my throat from ear to ear, hack me into itsy-bitsy chunks and then heave me into a Hefty trash bag (they won't leak, you know).

That did not come to fruition. Instead, he smashed the house up, emptied a couple hundred dollars from his account and smoked God-knows-how-much dope bought with the money. That was okay. You should have seen the time he overindulged in angel dust and ceremoniously pissed in an ashtray in the living room.

That is Dorian. He can do things, he can sham. He can read, it's true, but mostly simple

They knowingly rejected the world of responsibility and other such corny ideas. I am sure this sounds quite romantic to those who do not have to clean up after them.

things with a promenade of organs and intestines going in every direction. The problem is, Dorian can't tell the difference between Real Life and cinematic excess. *Alien, Enter the Dragon* — these alone are real. Their fury is real. Their portrayals of people deeply into retributive wishes are real.

Pummeling someone into a clot of liquid and skin. That's real too.

IN COLLEGE I WAS A SOCIOLOGY major. I studied the theorists who rejected the bourgeois notion that there were such things as bad boys, and that there was a culture of poverty. It was so hopelessly middle class to expound on "delayed gratification," or the idea that certain types can't plan their future and avoid needless expenditures of one's self and money. Crime could be nearly abolished once men were equal and poverty was stamped out. So far, so good.

What I found at the group home was kin to and yet alien from my academic background. Mass culture does indeed toast antisocial behavior: a very lucrative industry props up the glorification of violence that succors the people I worked with. Movies such as *The Warriors* would unfailingly rev up Dorian and the rest; at times they literally could not tell the difference between reality and movies. Reagan's near-assassination flummoxed Dorian. "So what," he told me. *"Alien* had more blood in it." We lectured him on truth and fantasy — and he honestly could not grasp what we were trying to explain: *"Clockwork Orange* was worse," he concluded.

But it *is* true that they could barely think ahead more than 24 hours. Consequences of acts were as remote as could be: Gary Gilmore's bravado about the death sentence mysteriously went packing when the final hour drew close. What they inherited from their parents — by their own guileless admission — and surroundings was a disregard for anything but the here and now. Stealing, drugs endlessly swallowed, petty brutalities — this was their world, one they accepted. They knowingly rejected the world of responsibility and other such corny ideas. I am sure this sounds quite romantic to those who do not have to clean up after them. What they had in common with Jack Abbott were their grimy origins, cretinous behavior, and insufferable dead-end "ideals." *Easy Rider* magazine, replete with slobbering male and female bikers, was a heavenly abode to them. How charming are the psychotic recitations of kicking someone's face to a pulp for no reason whatsoever (backed up by the ubiquitous "I felt like it") and the snapshots of paunchy nude women. The kids adored this, even — because of, I suppose — the motif of "burn yourself out fast because nothing means anything any more."

How anyone could read Abbott's *Belly of the Beast,* its pages sopping with blood lust, and think the art of writing could turn him into Bambi is beyond me. The vast amounts of energy and money funneled into rehabilitation rarely work. Will and choice are tougher nuts to crack than B.F. Skinner would think.

If my friend Ruth's murder has any meaning for me, it is to tabulate and log the savagery done to us. Revenge is not my motive: Ruth's killer was waylaid in a South Dakota motel by the FBI. Agents phoned him in his room; he positioned the receiver neatly in its cradle, then blew his brains all over his shirt. I do not care. What I do care about is that Ruth is long since dead and not only have we settled into a groove of being used for target practice, we turn around and revere those who did it because they "felt like it."

Resignation went out with love beads. Glorification of those who prey on us didn't. I want to take a vile death and redo my moral universe. The murderer is a faceless, nameless lump and he will never be anything but that. Ruth will always be the blithe, rococo character I recall — fascinated with botany and foreign travel, a composer of down-to-earth prose . . . but the rest of the list is dim. It's happening: I can't remember.

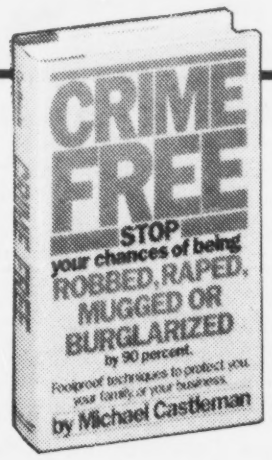
So I am left with a smattering of recollections and a belief in evil. Ruth in death at least lets me see she was loved abundantly, even lavishly. If one can record and testify without becoming a freak for pills or getting a sucked-dry soul, then that's half the trick.

Record and testify. ■

Crime Free

A commonsense book that compensates us for the macho dreams of other books on avoiding crime — even books we've reviewed. The author, who thrives on taboo subjects (his last book was ***Sexual Solutions****, Summer 1981* **CQ***), emphasizes that people can best stop crime by building communities. Besides telling you how to walk quickly with purpose or buy locks, Castleman puts those decisions in a bigger perspective — to be safe, you must design your life. There's a big section — the first in any book — on neighborhood crime watch programs (as described in "Redefining the Police," Spring '82* **CQ***), and sections on dealing with crime within the family, preventing rape, and the contradictory theories of crime prevention. My favorite anecdote comes at the beginning: how 7-11 stores, open 24 hours a day in inner-city neighborhoods, cut their crime losses 66 percent since 1976. They raised their cash registers above the store floor, floodlit the parking lots, and cultivated neighborhood cab drivers — all cheap measures that customers barely noticed.*

—Art Kleiner



Crime Free
Michael Castleman
1984; 239 pp.
$17.95
postpaid from:
Simon and Schuster
Attn.: Mail Order
1230 Avenue of
the Americas
New York, NY 10020
or Whole Earth Access

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Tear gas has a number of drawbacks: You must hit the assailant squarely in the face, preferably across the bridge of the nose so the chemical gets into the eyes where it's most effective. Contrary to most people's expectations, tear gas is not a wide-spray aerosol; it's more like shooting a water pistol. Most of the class, myself included, in a completely unpressured situation with good visibility and plenty of time to aim, had difficulty hitting the face, let alone the eyes, of the stationary practice dummy. In a real assault in low light, with a moving target and only a few moments to react, would it work?

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My brother David says many people waste a fortune on security hardware. He ought to know. He's a locksmith and he's secured thousands of homes. One of his favorite "wasted money" stories concerns an apartment he was once called in to secure after it had been burglarized. The owner had installed everything: a solid-core door, a heavy-duty dead bolt with a pick-resistant cylinder, a chain lock, a peephole, and a "police" lock with a steel bar that secured the door to the floor. The door frame was reinforced with metal strips. How had the burglar gotten in? He sledge-hammered a hole through the plasterboard wall next to the door frame, then reached inside and unlocked all the hardware. The break-in probably took less than a minute. Instead of that door's $500 worth of hardware, a simple double-cylinder dead bolt (key operated inside and out) would have prevented entry.

In Banks We Trust

The precarious position of some of our largest banks (Citibank, Chase Manhattan, Bank of America, etc.) that have given huge loans to various Third World countries is not news to **CQ** *readers. Readers of Szanto's Real Intelligence column on Brazil in the Summer 1983* **CQ** *got a head start on the headlines and the story continues to unfold daily.*

In Banks We Trust *is a gripping analysis of the high-risk world of international banking. Penny Lernoux, best known for her Latin American journalism (Fall 1983* **CQ***) here turns her attention to the role of banking in not only the Third World, but in organized crime, drug traffic, and the intelligence community as well. The recent scandals involving the Vatican Bank are treated at length, and it becomes apparent that all these realms are hopelessly intertwined, especially in the Banco Ambrosiano/Vatican affair.*

If you are concerned about where your money goes and what it does while it's there, look into ***In Banks We Trust****.*

—Jay Kinney

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The accounting profession has also contributed to dubious practices thanks to the cozy relationship between accountants and their bank clients. Peat, Marwick, Mitchell & Company, for example, gave Penn Square a clean bill of health for public consumption, yet it noted fourteen internal problems in a secret letter to the bank's management. Ernst & Whinney, another of the nation's "Big Eight" accounting firms, gave the United American Bank of Knoxville, Tennessee, unqualified approval three weeks before the FDIC declared the bank insolvent because of massive insider loans. How Ernst & Whinney's auditing team missed what was going on is a mystery, since United American and its branches were swarming with FDIC investigators at the time. The auditors' excuse for not seeking the regulators' opinion was that the firm did not believe the FDIC would share its findings, a claim that the FDIC said was utter nonsense. "In no instance would access to the findings have been refused," said an FDIC spokesman. Ernst & Whinney's track record also raised doubts about the thoroughness of its accounting procedures: As the auditors of Sindona's Franklin National Bank, it had found nothing to criticize before the bank folded in 1974. The FDIC subsequently sued the firm for failing to provide "correct opinions" on Franklin's financial status and won an out-of-court settlement.

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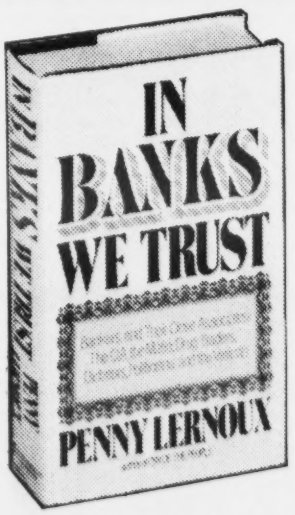
Banks are crucial to [criminal] activities because they launder illegal gains and provide financing for criminal projects. In places where such activities are widely accepted, such as southern Florida, even honest bankers have difficulty resisting the enormous profits, as shown by Miami banker Orlando Arrebola, who was indicted for "furthering the business of the bank" by accepting large drug deposits. Occasionally a strong bank will try to resist an unfriendly takeover by questionable investors. That happened in the case of Florida's Southeast Bank, which went to court to stop a real estate manipulator from buying more of its stock. Robert Marlin, the lead investor, had frequently been cited by Florida authorities for improper real estate dealings in the 1970s, but in the 1980s his interest shifted to banks, perhaps because they had become the hottest speculative item on the market. When one third of the banks in a large metropolitan area are suspected of laundering drug money, they reflect the mores of the community as well as those of the banking profession. As observed by a Florida grand jury that studied Miami's crime problems, it is "clearly a costly hypocrisy" to pretend that a commitment exists to eradicate narcotics when "our local economy apparently has benefited enormously and our culture has become tolerant of marijuana and even of cocaine."



In Banks We Trust
Penny Lernoux
1984; 318 pp.
$16.95
postpaid from:
Anchor Books
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth Access

Facing the Danger

This simple collection of brief oral histories is a useful antidote to the numbness that can result from trying to deal with the nuclear dilemma, or even the day's headlines. These are interviews, but the question and answer format has thankfully been dropped; what's left is the unfolding of personal insight and experience. Whether it is the Catholic Bishop of Amarillo, Texas or a former member of the Manhattan Project, the questions are the same: how did you become aware of the nuclear problem and what changes did that awareness make in your life? Through them all comes a strong dose of humanity. People make bombs, people make peace, people can act and action can bring change. —*Richard Nilsen*

•

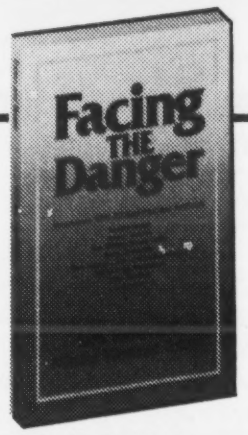
TED TAYLOR worked as a nuclear weapons designer in the Theoretical Division of the Los Alamos Scientific Laboratory for seven years. He was responsible for many technical and theoretical advances in nuclear weapons design, including the "Davy Crockett" bomb, the lightest and smallest fission device of its era. Today, Taylor is president of the Appropriate Solar Technology Institute; he is also an independent consultant who testifies before Congress on nuclear issues. Specifically, Taylor is considered to be an expert on the security for nuclear facilities.

Taylor's comments often come back to what he calls "the weapons connection." Manifestations of his concern include the proliferation of nuclear weapons in third world countries, the vulnerability of nuclear facilities to attacks which would release catastrophic amounts of radiation, and the threat of fissionable material being stolen by a terrorist or criminal organization.

". . . I've also raised another question: What would happen if a nuclear waste reprocessing plant was pattern bombed? One can say, without any ambiguity, how much radioactivity is tied up in one of those plants after ten years of operation going full tilt. You could make an exact estimate, for example, of the total amount of strontium 90 and cesium 137, two particularly nasty isotopes. You'd find out that the amount in one reprocessing plant would be about the same amount as the total quantity of those isotopes that would be produced by simultaneous explosions right now of all the nuclear weapons in the world. It's mindboggling! The damage from the pattern bombing of a reprocessing plant would be on the scale of a continent. But does anyone think about it? No!

"These days, I regret that I ever worked on developing nuclear weapons. To put it simply, I've seen that the world is now worse off with them than it was without them. And I'm unhappy about having contributed to it. And right now, I can think of no act which would be more barbaric, immoral, ruthless and plain *stupid* than exploding a nuclear bomb in a city. To say that we'll build the bombs and then in certain cases we might even use them — this is intolerable to me now. It's worse than any other thing I could think of, and I mean that. And it's *likely*.

"But I always ask myself, 'what's life about, anyway?' You may not think that you can push your little life raft to the shore to keep it from going over the waterfall, but you're sure as hell going to try! I would prefer to work hard to realize a world that might seem too good to be true, instead of drifting toward a future which I find too dreadful to contemplate."



Facing the Danger
Sam Totten and
Martha Wescoat Totten
1984; 171 pp.
$9.95
postpaid from:
Crossing Press
P.O. Box 640C
Main Street
Trumansburg, NY 14886 or Whole Earth Access

Social Stratification in the U.S.

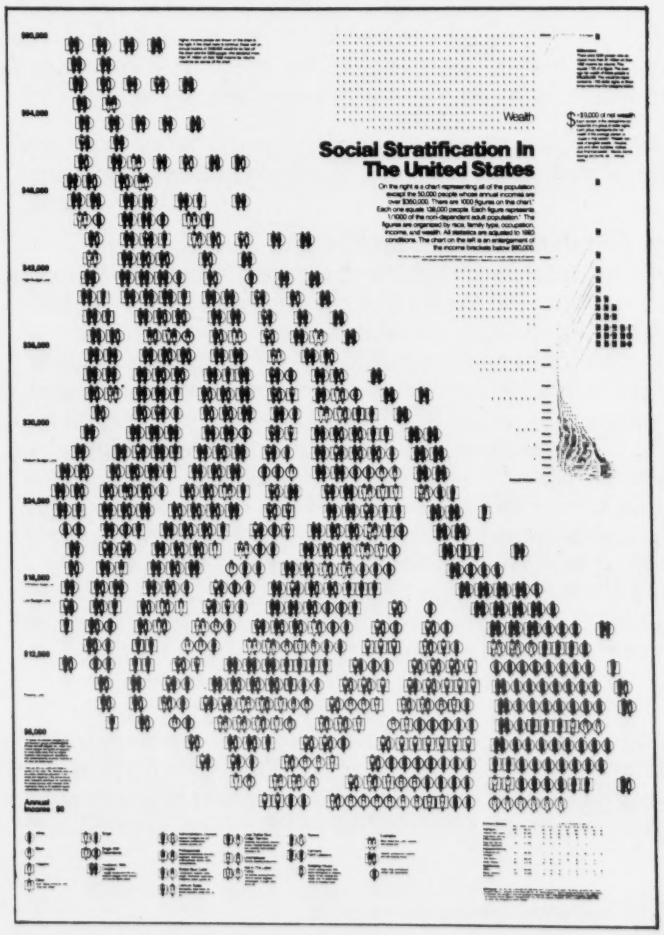
Whether used for self-education or in the classroom, this cleverly designed poster graphically demonstrates that the U.S. isn't the classless society that popular mythology would have it. The poster uses different costumed figures and colored shapes to spell out who makes how much doing what.

The graphic representation of the average net wealth of the 5000 U.S. millionaires compared to the average net wealth of everyone else is particularly stunning. Admirably, the poster allows you to draw your own conclusions and doesn't indulge in redundant polemicizing. All figures were taken from U.S. government reports and are accurate as of September, 1983. An explanatory booklet is also available. —*Jay Kinney*

Examples of categories from *Social Stratification in the U.S.*

Social Stratification in the U.S.
Kathryn Shagas, Stephan Rose, Dennis Livingston
1984; 3 ft. × 4 ft.
3rd Edition

$7.50 postpaid ($10 with booklet) from:
Social Graphics Co.
1120 Riverside Ave.
Baltimore, MD 21230



THE POLITICS OF RELIGION

Spiritual/Political Print Update

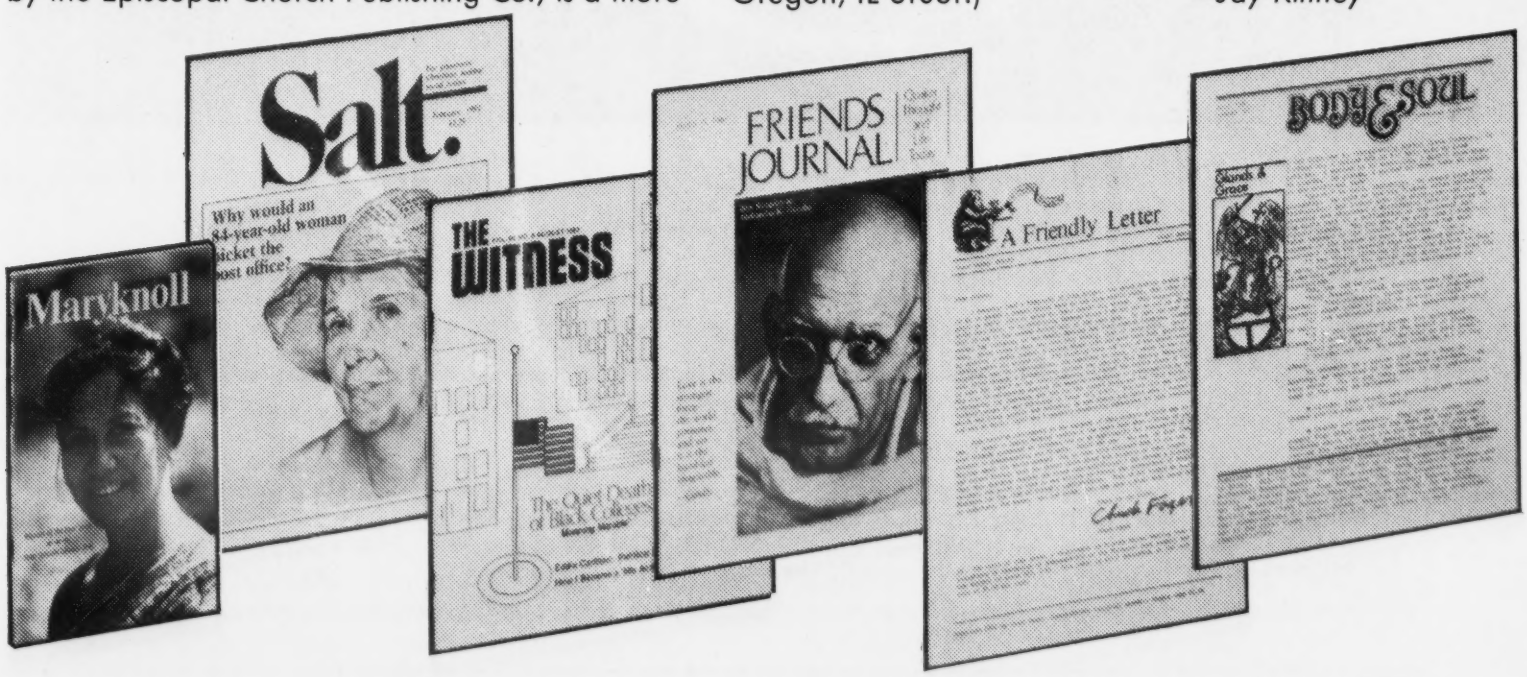
When I reviewed 16 magazines that regularly deal with religion and politics in the Fall 1983 **CQ**, I made no pretense of completely covering the field. I *did* investigate a representative cross-section which included evangelical Christian, Catholic, Jewish, Secular Humanist, and Islamic magazines, in flavors ranging from radical to conservative. (For the record, those 16 were: **Sojourners**, **The Other Side**, **Menorah**, **Midstream**, **Free Inquiry**, **Liberty**, **Church & State**, **Arabia**, **Latinamerica Press**, **IDOC Bulletin**, **Lucha**, **Religious Socialism**, **Commonweal**, **Catholicism in Crisis**, **Christianity and Crisis**, and the **Moral Majority Report**. Another key weekly, the **National Catholic Reporter**, was reviewed in the Summer 1982 **CQ**.) Inevitably, though, readers (and publishers) have continued to recommend further magazines, many of them just as deserving of notice as those previously surveyed. No doubt there are even more, but for the time being, as religion and politics continue to sizzle together in the same frying pan, here are some additional publications worth investigating.

Maryknoll is the full-color monthly published by the Catholic Mission Society of America. With a Maryknoll priest high up in Nicaragua's government, Maryknollers martyred in El Salvador, and Orbis, Maryknoll's publishing house, responsible for some of the most radical theological books in recent years, **Maryknoll** is in a special position to illuminate the role of religion in the struggles of the Third World and the poor. (Moises Sandoval, Editor; $1/year [12 issues], from Maryknoll, Maryknoll, NY 10545.) *[Suggested by Mark O'Brien]*

Two other monthly magazines have a strong emphasis on peace and social justice. **Salt** comes from the Claretian Fathers and Brothers, a Catholic order centered in Chicago. It's full of grassroots-level Christian writers sorting out how best to tackle social problems. **Salt** articles tend to focus on specific people, with a cover story each issue on a different little-known but committed individual. (Cathy O'Connell, Editor; $10/year [10 issues], from Claretian Publications, 221 W. Madison, Chicago, IL 60606.) **The Witness**, published by the Episcopal Church Publishing Co., is a more conventional political journal than **Salt**. It reads as if written by and for political activists and full-time clergy whose primary constituency are mainstream churchgoers. While **The Witness** is most likely to take a national and international perspective on politics — with reports on World Council of Churches meetings or overviews on national peace organizing, for instance — **Salt** usually concentrates on local parish concerns, a genuine example of "thinking globally, acting locally." (Mary Lou Suher, Editor; $12/year [12 issues], from The Witness, P.O. Box 359, Ambler, PA 19002.)

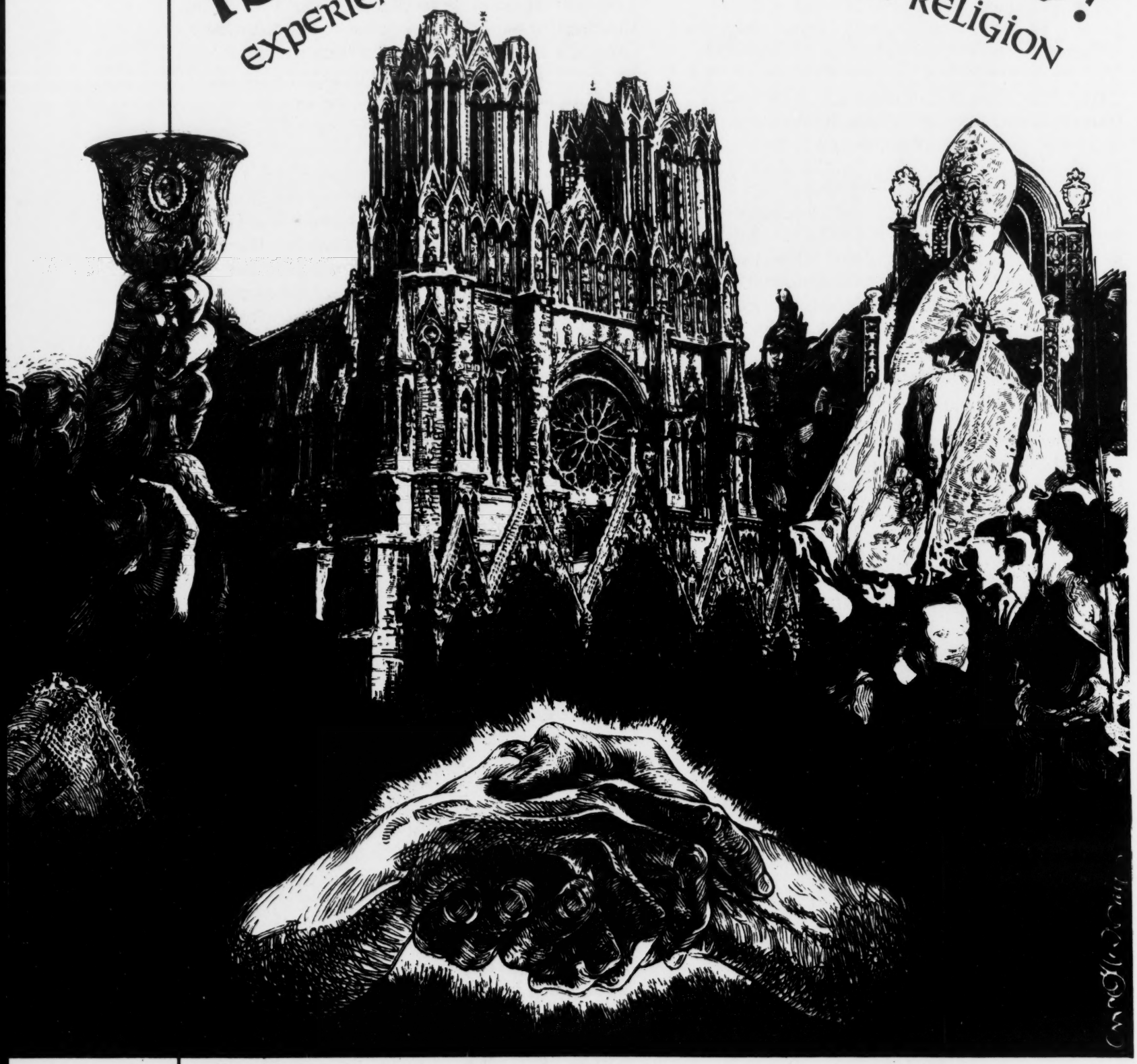
When the subject of acting on religious convictions in a political context comes up, the Quakers usually come to mind. **Friends Journal** is a well-edited twice-monthly magazine covering all aspects of Quaker life and thought. Common Quaker concerns such as pacifism and peace work are seen here in their full context. (Vinton Deming, Editor; $12/year [19 issues], from Friends Journal, 1501 Cherry Street, Philadelphia, PA 19102.) For insight into the politicking and organizational conflicts in Quaker ranks (which are divided up into several autonomous groups) you may want to check out Chuck Fager's monthly newsletter, **A Friendly Letter**. Fager, like many newsletter editors, has a strong, opinionated personality, which in this instance makes for a highly readable publication. **A Friendly Letter** appears well balanced between confronting controversial subjects that often polarize Quakers and making a sincere effort to bring together "the scattered outposts of Quakerdom." (Chuck Fager, Editor; $12/year [12 issues], from P.O. Box 1361, Falls Church, VA 22041.)

Another outstanding small-scale newsletter is **Body & Soul**, edited by Kenneth Guentert, who also writes regularly for **Salt**. **Body & Soul**'s terrain is conscious daily life — playful attention to the little things. There is a quiet spirituality pervading **Body & Soul** which blooms most fully into political dimensions in the broadside insert in each issue called **male&female: a forum for equality**. There's some very original nondoctrinaire material here. (Kenneth Guentert, Editor; $10/year [10 issues], from Alchemy Communications, P.O. Box 257, Oregon, IL 61061.) —*Jay Kinney*



IS ANYTHING SACRED?

EXPERIENCES OF POWER, POLITICS, AND RELIGION



by William E. Cane *Illustrated by Bruce McGillivray*

The prince, wrote Machiavelli, is to be taught from his earliest years "how not to be good."

Machiavelli's words, which come to us from the period of divine right of kings, will bring a glimmer of recognition to modern politicians. They may evoke a wince or a quick denial, but they will hit home.

Here's another installment of CQ's ongoing inquiry into spiritual groups' internal and external politics. This look at power struggles in one of the biggest religious organizations of all — the Roman Catholic Church — comes from former priest Bill Cane. These days, Bill and wife, Pat, live on six acres at Lake Freedom, California, and are engaged in organic farming, stained glassworking, writing, and running If, a nonprofit corporation devoted to opening up alternatives. Recent If projects have included gardens for handicapped seniors and developing new seasonal celebrations.

—Jay Kinney

The leaders of religious communities are no exception. Insofar as they deal with money, power, or prestige, they will be involved with power politics. And the aim of such politics, as Machiavelli points out, is not goodness; it is making a system work.

During the '60s and early '70s, I was thrust into the inner politics of a system which predated Machiavelli and served as a model for nations and corporations in the Western world — the Roman Catholic Church.

I was involved in a struggle for control of the church. I worked in a community where people experienced their own power and moved to the borderlines of Catholicism. And finally, I began a search for a new politics based on a new sense of what is sacred. What follows is: 1. a description of the struggle for control of the church, 2. a picture of people realizing their own power, and 3. a reflection on an emerging vision of the sacred as the basis for a new politics.

I did not belong to a religious order that tries to limit the political problems its members face by requiring vows of poverty, chastity, and obedience. I was a secular priest, ordained only two years when, in 1962, Pope John XXIII called together a council of Catholic bishops to introduce some democracy into a church where Pope, bishops, and pastors had traditionally ruled autocratically.

John was not an autocrat. When he was first carried in processions on an elevated chair from which he could look down on everyone, he complained, "It makes me dizzy!"

"Here I am, at the end of the road and the top of the heap," he remarked after elected as a compromise candidate — an old man who the "princes of the church" considered an interim, do-nothing Pope.

Unlike many ecclesiastical dignitaries, John felt a deep kinship with all human beings. "Our uncle, too, was in prison," he confided to a group of inmates at Via Coeli prison, as shocked Vatican officials looked on. He told Jews and Protestants he was their brother, and he addressed his first letter, "Peace on Earth," not just to Catholics, but to all men of good will. John took seriously the admonition of Jesus, "If anyone wishes to be first among you, he must become as the least and the servant of the others."

"A Christian on the throne of Peter!" marvelled Hannah Arendt, Jewish political scientist. And the Italians, who take a dim view of all politicians, made an exception for John: he was a santo.

John's council opened the church to the modern world and took some tentative steps toward church democracy.

One of these steps called for priests in each diocese to elect a senate of representatives to advise the bishop. (Up to that time, the bishop had appointed all of his own advisors.)

I was elected to represent the younger clergy in the San Francisco Bay Area (then the Archdiocese of San Francisco), and when the newly elected senate met, I was in charge of a committee to propose changes in the way the Catholic church operated and served people.

Suddenly, I received an invitation to dine with the Archbishop. There were over 1,000 priests in the diocese at that time, and apart from formal occasions, the Archbishop was not known to dine with many of them. Nervous and uncertain, but definitely intrigued, I drove alone to the Archbishop's residence, at that time a Pacific Heights mansion where the Archbishop lived with a monsignor. A group of Catholic sisters cooked and did the housework.

The monsignor greeted me at the door. We had Chivas Regal, which I relished before dinner and regretted having had later on. The dinner conversation was a polite exchange of formalities with a nervous tenor. The scotch helped. Abruptly, right after dinner, the Archbishop dismissed the monsignor with a wave of his hand, as if he were waving an altar boy out of the sacristy. His tone toward me became friendly and congratulatory. What an honor it was, he told me, what a privileged position I was in, and yet what a responsibility I bore.

For a moment, I wasn't sure what he was talking about. Then I focused. Of course: the senate. He was taking it much more seriously than I could have imagined.

Might we not — here the Archbishop adopted a confidential tone — might we not meet together from time to time to discuss my committee's proposals before they reached the senate floor? That way, both of us would benefit: the Archbishop would know what changes the priests were thinking about, and I would know what changes the Archbishop would accept. Senate proposals had no legal force unless the Archbishop approved them.

The effects of the Chivas Regal were gone and my mind was racing frantically. I knew I had to get out of the Archbishop's mansion without committing myself to anything. I told him I wanted some time to think, thanked him for a fine dinner and drove away into the night.

The conversation stunned me. Was keeping absolute control of the Church that important? It seemed to be. The Archbishop was struggling to keep his power and I was working with a group that wanted to see that power disseminated.

An image from the founding convention of the National Federation of Priests' Councils came back to me: A white-haired priest from Detroit had risen to the microphone and hammered, "Never forget it, the name of the game is power."

I had hoped to avoid that unpleasant reality. Now, I was face-to-face with it. And I knew that whatever hidden dreams I had nurtured of becoming a bishop myself had vanished.

The Archbishop learned of my noncompliance sooner than I expected. At the time, the Cardinal in Los Angeles was in the midst of a battle with Immaculate Heart sisters who taught in many of the parish schools, and also owned Immaculate Heart College. The Cardinal's contention was that the sisters would not obey his orders and were therefore disloyal to the church. The sisters were known to use guitars during Mass, to experiment with uniforms that were not traditional, to teach liberal ideas, and to have radical speakers such as Dan Berrigan lead them on a retreat. The Cardinal fired the sisters from the Los Angeles schools and had an agreement with most of the other bishops in California not to give them jobs in their dioceses. Meanwhile, he appealed to Rome for punitive action against them.

I had already asked one of the sisters to work with deaf children in San Francisco. The Archbishop learned of my plans, called me into his office, and told me that under no condition was I to hire an Immaculate Heart sister. I told him that I would take his admonition into very serious consideration when I made my decision. He became angry, insisting that I not hire the sister. It was all I could do to back out of his office, repeating that I would seriously weigh his words.

At this juncture, I realized that the Archbishop might very well fire *me*. "Suspension" is the legal term, which prohibits a priest from saying Mass, preaching, or dispensing the sacraments. But I hired the sister. And I waited.

Nothing happened. My gamble was that the Archbishop did not want it publicly known that the bishops were boycotting a group of sisters, and this proved to be the case. Nothing was ever put in writing; I never heard anything about the matter again. It became clear to me at that time that there was an enormous gap between the image that the bishops wanted to project and what was really happening in the church. It also became clear that if a politician was not willing to put something in writing, it was because he could not afford to have it reach the public eye. This situation afforded me certain freedoms.

In the months that followed, the executive board of the senate engaged in a battle of nerves with the Archbishop. After senate meetings we would march in and present him with the priests' proposals. The meetings were tense and exhausting. He would neither approve nor disapprove the resolutions, but would ask for more research or suggest that our proposals be sent to some other body within the Archdiocese for comment. We kept pressing him to approve or reject the senate's resolutions. He kept trying to bounce them back at us. On some matters he would give in, but he would harden whenever power, money, priorities, or control of personnel were at stake. He fought vigorously (and effectively) to keep the finances of the Archdiocese secret, to appoint pastors himself, and to evade any retirement plan for priests. When cornered, he told us that he had information we did not have, which he could not divulge! He was an extraordinary adversary.

I stayed for two years and then resigned from the senate, citing two reasons: first, by staying I was giving the impression that we could accomplish something substantial, and given the Archbishop's attitude I didn't think we could; second, I wanted to devote my time and energy to working with the deaf, and with a growing popular lay movement, the "cursillo."

Another concern gnawed at me. I was becoming very good at getting votes on the senate floor and at knowing what moves to make to forestall the Archbishop. The more I became involved with the fight for control of the church, the more manipulative I became. It was not exactly an exercise in evil, but it could well be described as an exercise in "how not to be good."

My own ministry provided a welcome relief from battling bishops. I didn't have to try to control things there. I wanted to encourage people to share power, and I wanted to help make diversity work.

My "parish," a center in San Francisco, was a strange and wonderful conglomeration. We had a church for the deaf, with sign language classes, social programs, job training, speech therapy, and a summer camp for deaf children. Among the deaf community and their families were Blacks, Filipinos, Latinos, Anglos, rich people and poor, Catholics and Protestants.

In addition to the deaf ministry, we administered a growing popular movement, the "cursillos." The cursillos, or "Courses in Christianity," were mixtures of human potential workshops, leadership training, and experiences of a different vision for Christianity. The cursillo was

an intensive three-day experience which forged friendships, provided a powerful experience of community and linked Christian belief to social and political concerns. The cursillos overturned the image of the church as an unchanging, rocklike institution and replaced it with a vision of people on the move, making decisions based on love and concern, rather than on strict moral precepts.

At our center, we held Spanish-speaking, Filipino, Catholic, and Anglican cursillos, each with its special flavor and cultural emphasis. Between 1965 and 1973, about 8,000 people attended our three-day courses and another 800 people were involved in giving them.

At any time of the day or night you might wander through the different buildings of our center and find deaf people speaking with their hands, Filipinos singing in Tagalog, Catholics and Protestants celebrating an agape or love-feast, or a group of farmworkers and their families living in the gym. In one way the place was ecstatic, in another way it was a zoo. The diversity was rich, but the misunderstandings were many. The new political challenge for me, and for all of us, was to find ways for people with different concerns and different cultures to trust one another and share a common vision.

Hearing people tended to avoid the deaf. When they saw hands flying, they thought "Oops, wrong room" and backed out. The deaf wondered why all these hearing people were wandering through "their" building. But as more hearing people took sign language classes, and as the more sociable among the deaf chanced conversations with them, a slow collaboration began.

Catholics and Protestants met at cursillos, nervous and uncertain. But once they got beyond labels and "differences" they found that they didn't want to be separate. They were enriched by each other and they wondered why church leaders were not more enthusiastic about ecumenism.

At times the most treasured of political gifts emerged — people representative of their own communities grew beyond serving their own interests to understand others and share a vision with them.

I remember once when the Filipinos decided to plan a surprise for the deaf community. They secretly learned some sign language and came and danced and sang songs in the language of the deaf. A big, black, deaf man rose to his feet and, with tears in his eyes, made the sign for "Filipino power." All the deaf joined him and there followed an outpouring of emotion and a mingling of bodies that went beyond language. A wall had fallen down.

An image from the founding convention of the National Federation of Priests' Councils came back to me: A white-haired priest from Detroit had risen to the microphone and hammered, "Never forget it, the name of the game is power."

Bill Hamlet, a police inspector who had trained over 100 deaf people for jobs with the post office, was dying of cancer. He had an unusual concern — he wanted to die in a way that would benefit the people around him. He asked a priest who had once stood between the San Francisco police and the Black Panther headquarters to prevent violence, to read the Beatitudes to the police department at his funeral. And though he never learned sign language, he asked that his hands be crossed in the deaf "hugging" sign for love at his funeral.

People taking initiatives, growing closer to one another and sharing power placed a strain on traditional Catholic rules, roles, and structures. The deaf began acting out gospel stories at Mass. Women preached. Catholics and Protestants collaborated. Our involvement with the handicapped, the United Farmworkers and the Peace Movement intensified. We were no longer typically Catholic. "Man's soul has somehow grown bigger," Kazantzakis wrote, "It can no longer fit the old molds."

I received admonitions from the Archbishop about lay persons touching the Eucharist, about Catholics and Protestants receiving the

Eucharist together, and about our offer of sanctuary to conscientious objectors to the Vietnam war.

What amazed me was that through it all we were allowed to continue. When we countered strongly, the Archbishop backed down. It surprised me. Although the Archbishop always had the authority to stop us, I believe, in retrospect, that we held the power.

Hannah Arendt has observed that *strength* is a strictly individual characteristic, whereas *power* rests with a group of people as long as they stay together and remain vocal. It is *authority* that rests with officials. Only when people cease to gather together and speak out (when they cease being organized) do they lose their power. And then officials, who remain organized, take over that power.

The Archbishop always had authority over us, but I believe he felt powerless to stop us. The Archdiocese funded none of our programs; the people supported us. We were no longer part of a closed church system, but were involved with others in movements much larger than the Catholic cause. The image of Filipinos, Latinos, deaf, Protestants, priests, nuns, ministers, and influential professional people marching in front of the chancery office must have been a nightmare for the Archbishop.

The Catholic seminaries of the Archdiocese, which did not have a popular constituency, did not fare as well as our center. The Archbishop attacked them for being too progressive and succeeded in removing most of the faculty members of both seminaries.

For a short time I reentered the political fray as president of the Priests' Association, an independent body which had about 25 percent of the diocesan clergy as its members. By that time the battle with the Archbishop had already been lost. I spent most of my time presiding over an exodus of progressive priests and sisters from the ministry. Of the 20 men I had been ordained with, five remained. Two out of 30 remained from the class two years ahead of ours. The battle for control of the church was over.

Nearly ten years had passed since my dinner with the Archbishop. Burned out and disillusioned, I retired to a neutral corner to teach at Graduate Theological Union. Priests and sisters coming there from all over the United States confirmed that my experience in San Francisco was not an isolated one. A wave of democracy and diversity had broken over the Catholic church and, by and large, those in authority had tried to beat it down. The results were emptied convents and seminaries all over the country. The median age of members in religious orders (which used to hover around forty) is now well up into the fifties.

The bishops tried to exercise authority in the old way, but the numbers over whom they could exercise it dwindled. Their stands on birth control and celibacy and their autocratic treatment of people (especially women) had eroded their support more and more. They were still in charge, but they could no longer obtain a consensus for their policies within an increasingly pluralistic church. Ultimately, their exercise of authority proved to be little different from the exercise of power in any organization. The bishops were willing to bolster hierarchy and patriarchy at almost any expense, and they claimed that in doing so they were acting "for the good of the church."

Once the bishops' consuming need to reinforce a hierarchical and patriarchal system became obvious, a major shift began to occur in Catholic politics. A significant number of Catholics ceased to regard loyalty to the pope and bishops as questions central to their lives; some focused instead on the larger questions of human oppression, the arms race, and the survival of life on earth.

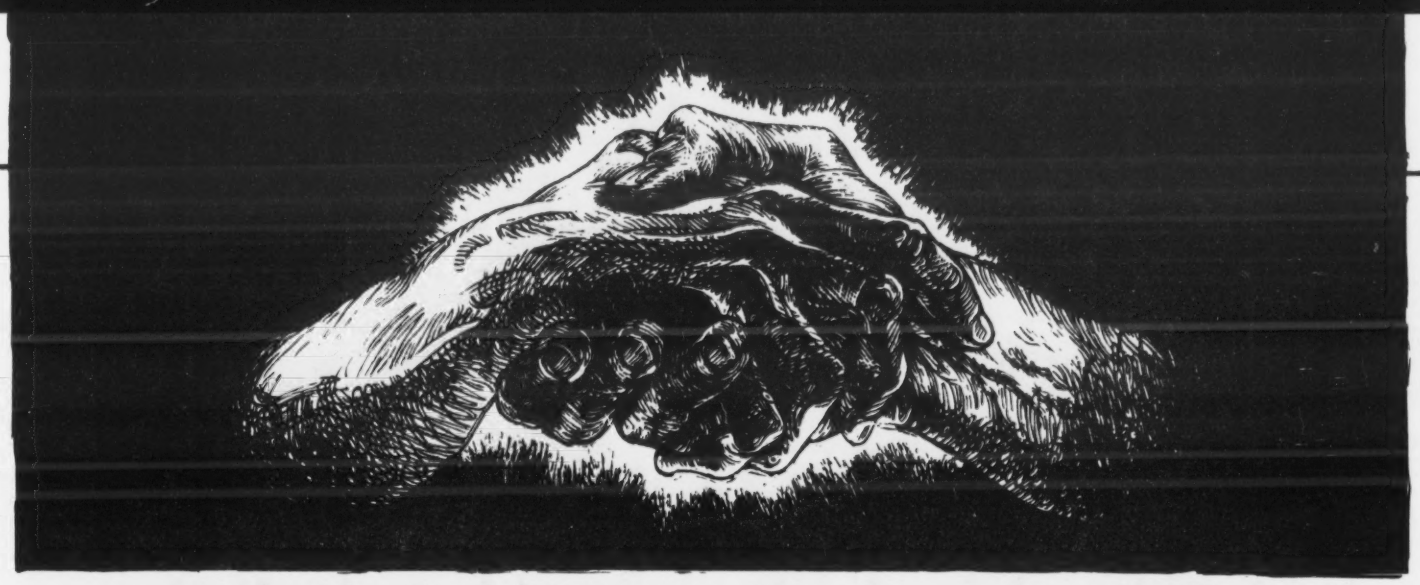
What had always been inviolable for these Catholics — the sacred authority of the church — was being overshadowed by a still more sacred authority making its claim on them.

Archbishop Romero and church women assassinated in El Salvador, the hundreds of priests imprisoned or deported by the Marcos regime, the three priests who have refused to follow the pope's orders to resign as ministers of the Nicaraguan government, the thousands of priests and sisters protesting the nuclear arms race decades before the American bishops became interested in the question — these are but a few examples of those who have moved beyond Catholic institutional interests to a much broader sense of what is sacred.

These Catholics and others like them, many of whom remain within the institutional church, and many of whom consider themselves simply Catholic in background, have recognized the outlines of a wholeness they consider more sacred than the boundaries of institutional Catholicism.

That vision of a sacred wholeness is still taking shape and cannot be clearly delineated. But in physics, biology, health care, ecology, philosophy, spirituality, the Peace movement, and the movements of oppressed peoples, fragile systemic wholes are being recognized which sustain life on earth and which must not be violated.

I remember a black man trying to impress this sense of sacred wholeness upon a bishop.



In theological language, the church has shifted from envisioning itself as being the world's salvation to becoming a hopeful sign of the salvation of the world.

"Bishop," he said, "the world is *round.* You can't sweep people off the edge when you're through with them. You can't sweep your garbage off the edge either. The world is round, and sooner or later, if you try to sweep things over the edge, they gonna come back up around the other side and bat your ass!"

Our garbage returns to us as acid rain or nuclear fallout or violence. "God is not mocked. What a man sows, the same also shall he reap."

There is a growing sense that in trying to dominate nature, in oppressing people, in making ideological "enemies," in scraping profits out of the earth and in piling up nuclear or biological arsenals, we are not just violating others, we are violating ourselves.

"Love your neighbor as yourself" may be more than a religious admonition. It may well be a condition of survival on earth. Paul's statement that we are one body, members of one another, may be a deep ecological truth. In an interdependent universe, the hand cannot say to the foot, "I have no need of you."

It would be naive to assume that a sense of this wholeness, of karma and of systemic wisdom, is sweeping the Catholic church. Yet what has swept over it in the past twenty years is significant and surprising.

Once people stopped giving the pope and bishops power over their lives, the political power of the church was drastically reduced.

Missionary and conversion efforts have dwindled to insignificance. In the church's own rhetoric, it now exists to serve people rather than dominate them.

Ecumenism has changed the atmosphere among churches from one of competition to one of cooperation.

The revolutionary movements in South America and the growing awareness of nuclear madness in the United States and Europe have changed the church's agenda. The old claims that the church is sacred and its directives sacrosanct are being replaced with the questions: Is life on earth sacred and are the aspirations of oppressed peoples sacrosanct?

In theological language, the church has shifted from envisioning itself as *being* the world's salvation to becoming a hopeful *sign* of the salvation of the world.

Recent attempts by the pope to restore conservative teachings, discipline and authority in the church, to eliminate progressive theologians and keep priests and sisters out of politics have come too late.

It may be that the movements at the edges of the church will eventually become mainstream, as is happening with the antinuclear movement; or it may be that the pope and bishops will succeed in reasserting their authority over a dwindling number of Catholics. In such an event, the Catholic community may become more like the Jewish community — not necessarily identified with church structure.

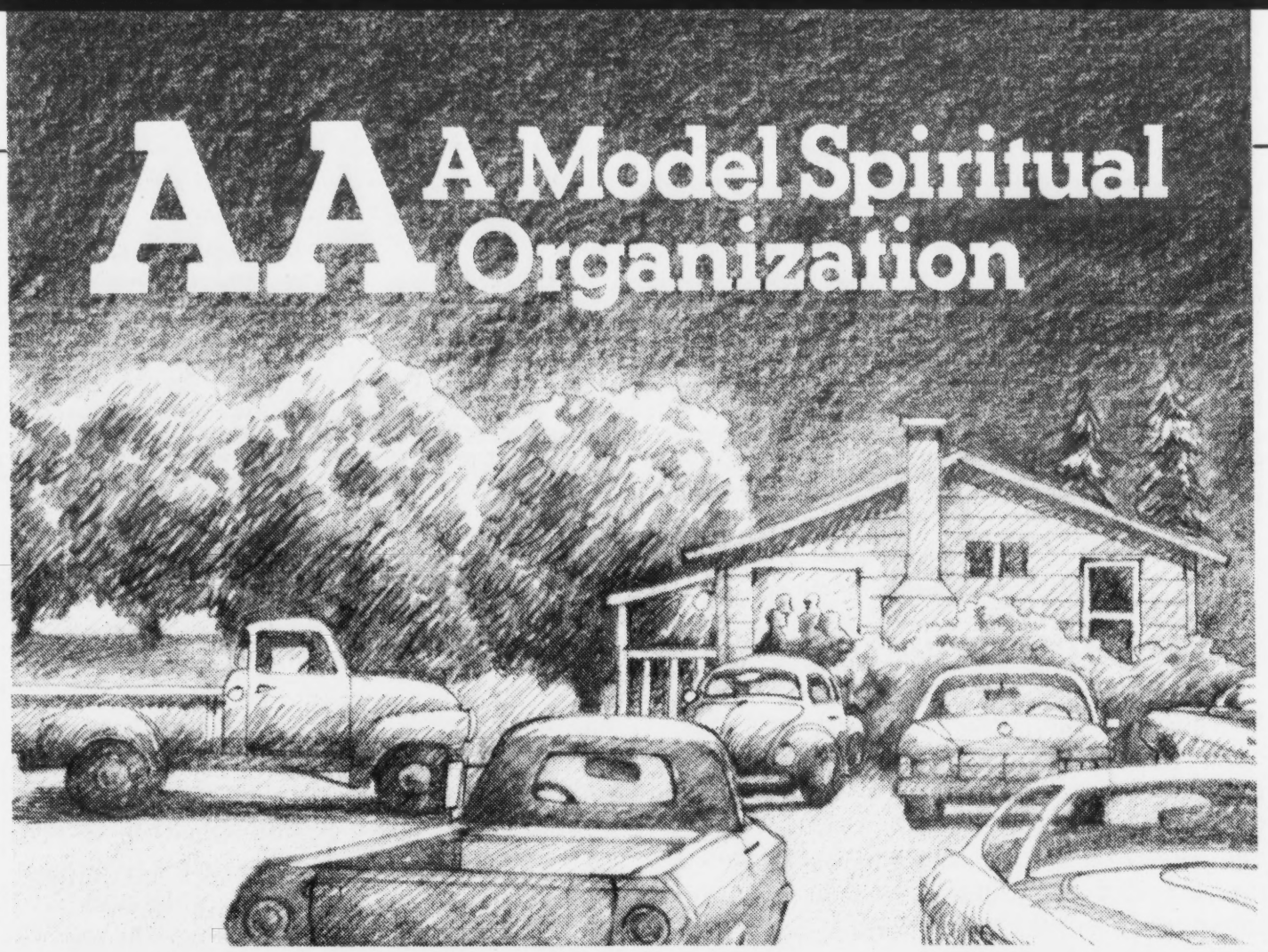
In pondering the future, I am always reminded of Hannah Arendt's observation that surprise and unpredictability lie at the very heart of history.

Pope John, who we must count among the surprises of history, always claimed that the council he called was not his idea, but came to him as a sudden inspiration from beyond. Shortly before his death, he was approached by a group of progressives who claimed that the conservative cardinals were gaining control of the commissions of the council and bringing all proceedings to a halt.

"Little children," John replied, with a look that reached beyond death, "no one will destroy my council."

I wondered then, as I often wonder now when I look at the grim political prospects in the world around us, if the old pope knew more than most of us can see. ■

AA A Model Spiritual Organization



by Martha Burning *illustrated by Ellen Sasaki*

I WANT TO ADD A FEW COMMENTS on mutual-aid groups to ***CQ's*** continuing review of the politics of religion. These comments may confuse some readers. "Mutual-aid groups? You mean Alcoholics Anonymous and self-help organizations like that? Aren't they, well, for people in need of medical care? What does mutual aid have to do with religion?"

Take a look at some of the mutual-aid societies that have functioned in North America since the 1930s. In particular, take a look at the political workings of one spiritual-minded group, Alcoholics Anonymous. AA emphasizes "spiritual experience" and "spiritual awareness," but it never forgets the needs and the interests of individual AA members. AA has its faults and its limitations, and, at times, some AA leaders can be as smug and self-righteous as any cult guru or swami. Still, in contrast with authoritarian movements, AA groups remain democratic and cooperative.

What keeps an organization like Alcoholics Anonymous from going over the edge? What protects AA from becoming an autocracy, or a profit-making enterprise, or the extension of a single ego? In part, I suspect that AA succeeds because of the basic operating principles on which the movement was founded. ***CQ*** readers interested in the politics of religion may want to consider some of the following points that are included in the "Twelve Traditions" of Alcoholics Anonymous. (All quotations are taken from the original AA "long form" as first published in 1945 [*NWEC* p. 329].)

- ***"With respect to its own affairs, each AA group should be responsible to no other authority than its own conscience."*** Group autonomy is extremely important in Alcoholics Anonymous. Traditionally, any two or three alcoholics "gathered together for sobriety" may call themselves an Alcoholics Anonymous group, provided that, as a group, they have no other affiliation. In matters concerning other AA groups, consultations are made with the individual groups concerned, or with the national AA trustees. No bishop or Grand Inquisitor appears in the field to demand compliance with dogmatic fine points. In AA, most of the decision-making authority rests at the grassroots level.

- ***"Problems of money, property, and authority may easily divert us from our primary spiritual aim. We think, therefore, that any considerable property of genuine use to AA should be separately incorporated and managed, thus dividing the material from the spiritual. An AA group, as such, should never go into business."*** An AA-maintained restaurant, or an AA temple or roadside attraction, would draw attention away from the organization's goal. Alcoholics Anonymous is a self-help network that has one basic purpose — that of encouraging individuals to help themselves and each other within the context of

Martha Burning lives in Boston, where she is engaged in neo-pagan and environmental protection activities. —Jay Kinney

spiritual association. An AA group concerned about building a new parking lot, or consistently preoccupied with plans for carnival games and rummage sales, could easily lose sight of its primary purpose. AA strips itself of excess weight.

• ***"The AA groups themselves ought to be fully supported by the voluntary contributions of their own members."*** AA group budgets are modest. If members are unable to financially support their group activities, the hat is passed again. AA groups rarely, if ever, appeal to the public for financial support. AA isn't dependent on government gifts or on foundation grants.

• ***"Alcoholics Anonymous should remain forever nonprofessional."*** AA doesn't function on a fee-for-service basis. Instead, AA emphasizes voluntarism, self-help, and cooperation within the AA community. AA service centers may, in some instances, employ special workers. Unlike some New Age movements, however, AA doesn't regard itself as being a source of training and employment for profit-seeking therapists. Alcoholics Anonymous has its share of leaders, respected for their work in the movement, but AA leaders don't become wealthy as a result of AA service.

• ***"Each AA group needs the least possible organization. Rotating leadership is best."*** There's an anarchistic streak — in the best sense of the term — that runs through the whole of Alcoholics Anonymous. AA groups tend to be loose and very democratic. Alcoholics Anonymous has had some headstrong and charismatic leaders in its groups. Still, because of AA's political structure, it would be difficult, if not impossible, for a Jim Jones to exert much authority within AA. Over and over again, AA members are reminded: "Our leaders are but trusted servants; they do not govern. They derive no real authority from their titles . . ."

• ***"No AA group or member should ever, in such a way as to implicate AA, express any opinion on outside controversial issues . . ."*** Alcoholics Anonymous, as an organization, steers clear of political, social, and sectarian disputes. Individual AA members, of course, are free to do as they like outside of the group, and many AA members are active in public affairs. In contrast to militant right-wing and left-wing spiritual movements, however, AA isn't involved in "social gospel" work. AA doesn't provide its leaders with a soapbox from which to lecture the public. "The Alcoholics Anonymous groups oppose no one." The AA political structure won't produce a Gandhi. Nor will AA produce an Ayatollah Khomeini or a Cotton Mather.

• ***"We think AA ought to avoid sensational advertising . . . Our public relations should be guided by the principle of attraction rather than promotion."*** AA leaders can be overly zealous, at times, in presenting their point of view to prospective group members. Still, the organization doesn't participate in the kind of razzle-dazzle stunts that have recently become popular with some religious movements. You won't see 10,000 AA members packing into the Madison Square Garden, or onto an Iowa farm, chanting hymns of praise to a new messiah. AA doesn't send out very many press releases.

Alcoholics Anonymous was established during the 1930s. In the past half-century, AA has inspired many other mutual-aid organizations. Increasingly, the AA approach to "group politics" is being adapted for use in small religious associations. Among neopagans, for example, there's now an impressive mix of covens, circles, councils, and medicine societies, all functioning as anarchistic mutual-aid movements with a pantheistic spiritual vision.

My final quotation is taken from E. F. Schumacher's book *Small Is Beautiful (NWEC,* p. 40). If we can speak of economics "as if people mattered," isn't it possible, also, to speak of religion as if individuals were important?

> In the affairs of men, there always appears to be a need for at least two things simultaneously, which, on the face of it, seem to be incompatible and to exclude one another. We always need both freedom and order. We need the freedom of lots and lots of small, autonomous units, and, at the same time, the orderliness of large-scale, possibly global, unity and coordination. When it comes to action, we obviously need small units, because action is a highly personal affair, and one cannot be in touch with more than a very limited number of persons at any one time. But when it comes to the world of ideas, to principles or to ethics, to the indivisibility of peace and also of ecology, we need to recognize the unity of mankind and base our actions upon this recognition.

In every age, individuals have found comfort and protection within the basic units of their society — in the informal groups, associations, and networks that hold large communities together. The communes and the extended family arrangements that have served peasant societies are difficult to maintain in modern America. Still, there are opportunities to establish mutual-aid groups — affinity groups — that can function for all of their members. Within these small circles, we may find opportunities to experience ourselves as individuals. We may discover new ways of loving and caring for each other in intimate, egalitarian arrangements. ■

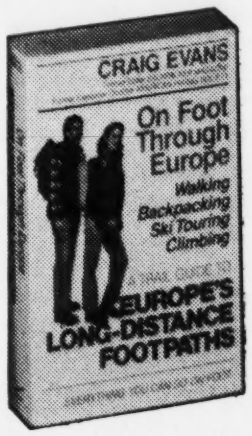
On Foot through Europe

Although these books are not mile-by-mile trail guides, they do provide excellent access to all the information needed to plan hiking, backpacking, or ski-touring vacations in western Europe. I've used the volume on the British Isles and found it to be both accurate and extremely valuable. But be advised, buy the book early so as to have time to send off to Europe for the specific maps, guidebooks, and information that you'll need to plan the details of your trip. —*Lance Alexander*

On Foot Through Europe Trail Guides

Europe's Long Trails	$10.50
British Isles	13.00
West Germany	10.50
Scandinavia	13.50
France & Benelux Nations	11.50
Spain & Portugal	10.50
Austria & Switzerland	10.50

postpaid from:
Foot Trails Publications
Suite 53
Bedford Road
Greenwich, CT 06830
or Whole Earth Access



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In most countries finding places to stay along the trails is easy. There are mountain refuges, mountain stations, self-service huts, bivouacs, bothies, trailside inns, guesthouses, chalets, youth hostels and a variety of other lodgings from which to choose. The majority are owned and operated by Europe's various alpine and walking clubs, but are open to both members and nonmembers. Camping clubs and Friends of Nature societies also operate trail lodgings, as do many local families. In addition, there are many possibilities for accommodation in the towns and villages through which the trails pass.

Nonetheless, you should know where overnight lodgings are located *before* you start your hike and then plan each day's walk accordingly. Some trailside lodgings are only a two or three hours' walk apart, but others may take a full eight hours — or more — to reach. And few things are so disconcerting as wondering which will come first—darkness or the next place to stay.

Alpine and walking clubs publish lists of the refuges and inns they operate. Such lists tell you where the lodgings are located and how to reach them by trail, the facilities found in each and the dates they are open. Some hut lists even give the map coordinates for each hut and include small-scale sketch maps to show you where they are located in the country. Guidebooks provide much of the same information, along with the walking times between each overnight shelter. Hiking maps also show the locations of trail lodgings. You should always check each of these resources when planning a hike.

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FULDA TO BUTZBACH, GERMANY
Through the Vogelsberg, where small towns are scattered among gentle, rolling hills, some up to 774 meters in height. Through woods and meadows and across a high moor noted for its unusual flora and fauna; many streams. ***Length:*** 118 kilometers. ***Walking Time:*** 5 days. ***Difficulty:*** Easy. The highest climb is up to the Hoher Rotkopf — an altitude gain of 600 meters over a distance of 37 kilometers. ***Path Markings:*** Blue crosses.

Maintained by: Vogelsberger Hohenclub.

Trail Lodgings: Youth hostels at Fulda and Schotten. Other lodgings available. Information can be obtained from Hessische Landeszentrale fur Fremdenverkehr.

Maps:

- Hessiches Landesvermessungsamt Topographische Karte 1:50,000, Ausgabe mit Wanderwegen, sheets L 5522 *Herbstein, Naturpark Hoher Vogelsberg* and L 5518 *Giessen*.

Available From: Hessiches Landesvermessungsamt.

Guidebook:

- A route description for E-3 is available from the Vogelsberger Hohenclub.

Further Information: Write the Vogelsberger Hohenclub. You may write in German or English.

—*Europe's Long Trails*

Traveler's Maps

Gas stations have ruined our appreciation of maps: it's not very often that art as valuable as maps has been given away free. So don't expect service stations in, say, China to give them away free. Get them here before you go, from the best mail-order source for detailed maps of faraway places: Eagle Eye Maps.

Eagle Eye flattens and folds the whole globe into transportable, useful pieces, everywhere from Alberta to Upper Volta. Beware: nothing begets adventure like a map of a strange land. —*Kevin Kelly*

All from big-name map publishers (Michelin, Bartholomew, K&F, etc.) I know of no other mail-order source for the great geographic range in this catalog.

—*Don Ryan*

Traveler's Maps
Catalog

free from:
Eagle Eye Graphics
P.O. Box 30917
Seattle, WA 98103

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FRANCE
Michelin (989)
You couldn't ask for a more detailed view of France on one sheet than this work of art. All major roads are clearly shown, as are cities, airports and ferries. The legend is in French, English, German and Italian. Insets give seasonal road closures (in the mountains) and other motoring information. 1981 revision.
1:1,000,000 (1 in = 15.8 mi)
47½ x 38½ open; 4½ x 9½ folded-ac
02 30 02 ..... $4.25

JASPER NATIONAL PARK (NCR 217) 1:250,000 (1 in. = 4 mi.) CI = 500′ 1974 Beautiful SR 38 × 20 open; 5 × 10 folded-ac

Beckel Canvas Products

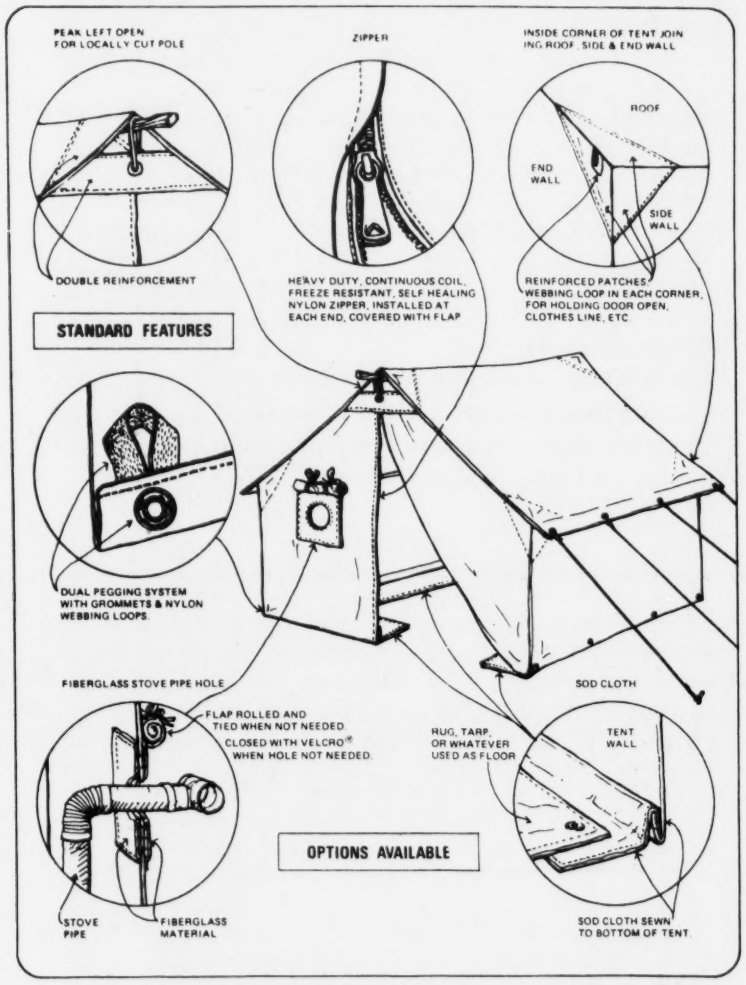
Not everyone is entranced by the latest tent designs. For those of you that don't care for geodesic sandworms fashioned from foo-foo cloth, this outfit still makes the old tried and true, heavy canvas woods-ware. In addition to tents, they stock plain tack for pack horses, collapsible camp stoves, and lots of other old-guard, well-proven tough stuff.

—J. Baldwin

(Suggested by Dan Hannon)

Beckel Canvas Products
Catalog
free from:

Beckel Canvas Products
2232 S.E. Clinton
Portland, OR 97202



Prisma Field Notebooks

These durable and practical notebooks were designed by Mark Levorsen and Priscilla Pattison when they were in an Environmental Studies field program together at UC Santa Cruz six years ago. Mark and Priscilla have since married and established a small business in Vermont. The field notebooks remain popular with Environmental Studies students on the Santa Cruz campus, advertised mainly by word of mouth endorsements from the program's alumni.

The field notebook is a plastic 3-ring binder with a waterproof Cordura nylon cover that zips around three sides. It's an ideal tool for field biologists, travelers, and journalists — or anyone who needs a compact, portable desk away from home. It has six built-in pockets for holding field guides, maps, pens, rulers, calculator, etc. . . . Bulky items such as wallets or small binoculars can be zipped inside.

The notebook comes in four models that hold paper sizes ranging from 3¾ × 6¾" to 8½ × 11". Cost ranges from $13 — $26. I use the "Field" model, which holds 6 × 9½" paper. It is extremely well made and has held up well for me on innumerable excursions. The field notebooks come in four colors: blue, green, burgundy, and brown.

—Susan Hartgroves

Prisma Field Notebooks
$13 — $26
(Four sizes available)
brochure **free** from:
Prisma Outdoor Products
P.O. Box 792, Rt 5 South
Norwich, VT 05055

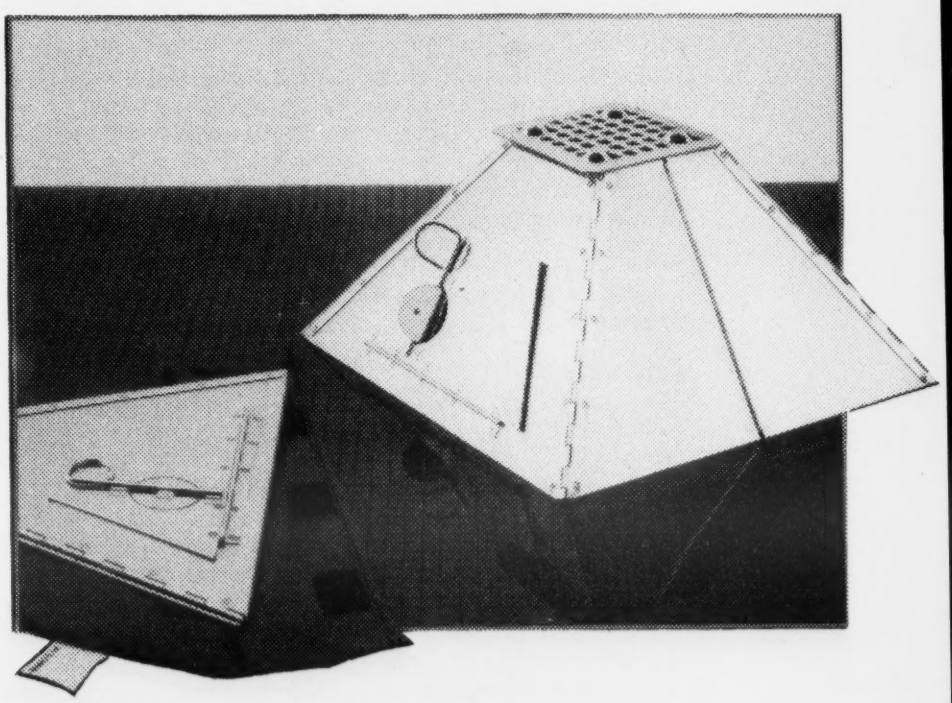
Pyromid

Set your campfire in a stainless-steel box, and you can cook just fine without danger of setting the place on fire. Most of the various forms of this basic idea pack into reasonably small and light sacks. The Pyromid is available in the simple form shown, a hibachi, and a ten-person-size kitchen arrangement. Looks like a good idea for use where it's still acceptable to burn wood, but safety and convenience make a typical campfire undesirable.

—J. Baldwin

Pyromid
Information **free** from:
Pyromid, Inc.
329 Bryant St., Suite 2C
San Francisco, CA 94107

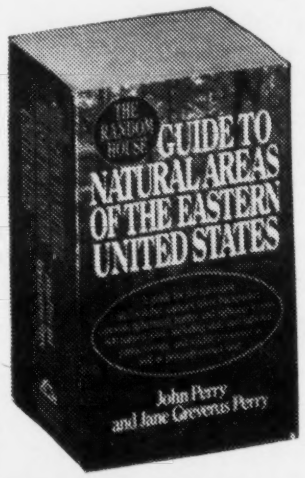
The Pyromid's fuel efficient pyramid shape focuses heat on the cooking surface. You can fry, braise, boil or saute on top, bake potatoes or corn inside the enclosure, and make toast on the sides. The 12″ Pyromid (P12) weighs 1 lb. 6 oz. Dimensions assembled: 12″ × 12″ × 7″. Dimensions collapsed: 12″ × 7″ × ½″.



The Random House Guide to Natural Areas of the Eastern United States

Now there's a snappy title. . . but it's appropriate for a book of this comprehensiveness and consequent girth. An attempt has been made to locate and describe virtually every known preserve, park, and undeveloped area from New England to Florida, while discreetly omitting places that would be ruined by increased visitor load. (As always, you have to find those magic spots yourself.) Some may quibble that this sort of guidebook tends to overload sensitive spots anyway, but I think that lots of people appreciating undeveloped areas will tend to vote to keep them that way. I tested the entries for my state of New Jersey against personal experience and found the descriptions right on the mark. —*J. Baldwin*

The Random House Guide to Natural Areas of the Eastern United States
John Perry and Jane Greverus Perry
1980; 835 pp.
$12.95
postpaid from:
Random House
400 Hahn Road
Westminster, MD 21157



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ASSUNPINK WILDLIFE MANAGEMENT AREA
Division of Fish, Game and Shellfisheries
4,608 acres

From NJ Turnpike exit 8 (Hightstown), 1 mi. W. on SR 33; then S on SR 539.

Small portion is NW of turnpike; most acreage E of SR 539. Fields, hedgerows, woods. Several lakes, small streams. Crossed by several secondary roads. Said to be one of the best birding areas in cent. NJ.
Birds: Lakes are resting places for migrating waterfowl. Pheasant, quail, woodcock, grouse resident.
Information: Office on Robbinsville-Clarksburg road.
Hiking: Roads and informal trails.
Hunting: Waterfowl. Small deer herd. Rabbit, squirrel, upland game birds.
Fishing: Lakes. Management based on largemouth bass and bluegill. Also present: pumpkinseed, brown bullhead, chain pickerel.
Boating: Park/launch facilities at Stone Tavern and Rising Sun lakes. Electric motors only.

HEADQUARTERS: Division of Fish, Game and Shellfisheries, P.O. Box 1809, Trenton, NJ 08625; (609) 292-9450.

From the Ground Up

Any book that's in a twenty-third edition must have something solid to offer, and in this case it's a thorough approach to flying, written by a Canadian instructor with a half-century of flight experience that included two wars.

The book offers all the facts a private pilot needs to know, as well as giving us some wisdom that only trial and error can produce. It goes from theory of flight and engines to meteorology, radios and navigation. The few discrepancies between Canadian and U.S. procedures are slight, and more than compensated for by the author's experience. Whether you're starting to study flight or reviewing the topic, this is as good a book as you'll find.
—*Dick Fugett*

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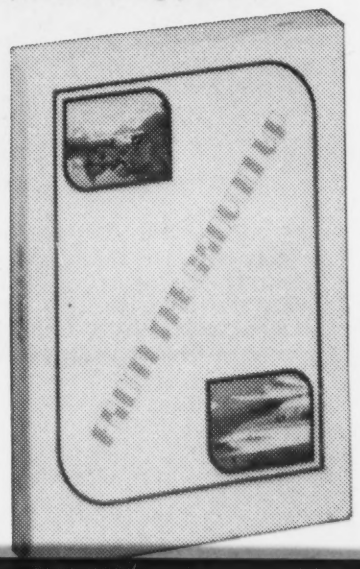
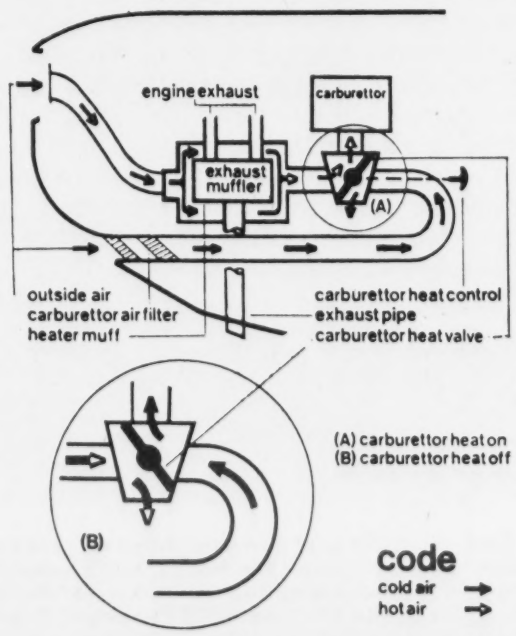
Liquid gasoline must be changed into a vapour and mixed with air to become combustible. This process occurs in the carburetor. The heat that is required to change the liquid gasoline to a vapour is absorbed from the air that passes through the carburetor and into the manifold. The carburetor therefore is, in effect, a miniature refrigerator, the temperature in this mixing chamber dropping as much as 30 degrees Celsius below the temperature of the incoming air.

If this air contains large amounts of moisture (and most air contains some water vapour), the cooling process will cause the water vapour to condense and possibly freeze on all surfaces of the carburetor but especially on the throttle butterfly. It is possible for this "icing" condition to occur, as can be seen, with outside air temperatures as high as 30° C, in bright sunshine with no sign of rain.

Under certain *moist* atmospheric conditions, with air temperatures ranging anywhere from approximately −5° C to 30° C, it is possible for ice to form in the induction system. This can pose serious problems for the pilot if he does not take action to rid the carburetor of this ice that is gradually closing off the flow of fuel to his engine. The fact that carburetor ice is responsible for a great many aviation accidents is perhaps indicative that many pilots, especially inexperienced ones, do not have sufficient respect for or appreciation of the ever present dangers of this icing problem. Such accidents can be prevented only by greater pilot awareness and vigilance.

From the Ground Up
Sandy A.F. McDonald
1978; 241 pp.
23rd edition.
$17.95
postpaid from:
Aviation Book Company
1640 Victory Boulevard
Glendale, CA 91201





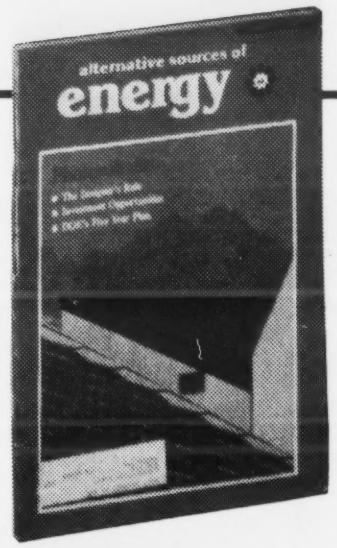
Carburetor Heat System.

SOFT TECHNOLOGY

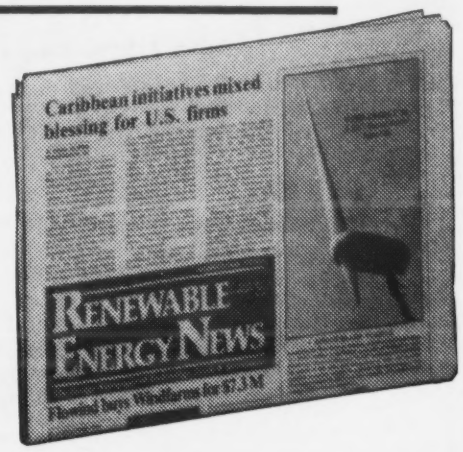
Old Friends Growing Up Department

Alternative Sources of Energy *(ASE) magazine has been around about the same number of years as* ***CQ****. It's grown from being a forum for backyard inventors and a product-exists newsletter to the present sophisticated manifestation. Lately, they've taken to having issues dedicated to one subject, such as wind or hydro. Some folks bewail the reduction of down-home do-it-yourself energy news, but I personally like the concentrated state-of-the-art news of the recent issues. Now that the basics are well served by easily obtainable books, there is less need to serve the tinkerer and more need to serve folks who want their alternative energy delivered by reliable factory-made devices just as with an automobile. You don't see many do-it-yourself car magazines, do you? This sort of change in a magazine reflects the maturity of an endeavor that, in this case, the magazine itself helped bring about. I take it as a good sign: alternative energy is going mainstream. It's about time, even if it isn't quite as much fun.*

Renewable Energy News *has grown up too, and, like* ***ASE****, is doing issues concentrating on one aspect of energy — wind, for instance.* ***REN*** *is more newsy than* ***ASE****, and has no homeowner-level information at all. On the other hand, it appears twice as often, so the news tends to be current. I should mention that there are weekly and biweekly energy news publications, but they tend to have ridiculous prices (would you believe $180/year?) and are aimed mostly at commercial interests.* ***REN*** *is a good compromise. Both this paper and* ***ASE*** *have attracted many advertisers with their new policies, which is good for everybody. How can you buy something if you don't know it exists? Moreover, when a publication has many rival firms advertising, it is usually only a matter of time before ''road tests'' appear — the ultimate consumer assistance.* —*J. Baldwin*



Alternative Sources of Energy
Donald Marier, Editor
$19.50/year
(6 issues) from:
Alternative Sources
of Energy
107 South Central Avenue
Milaca, MN 56353



Renewable Energy News
$28/year (12 issues)
from:
Renewable Energy News
Box 690
Ogdensburg, NY 13669

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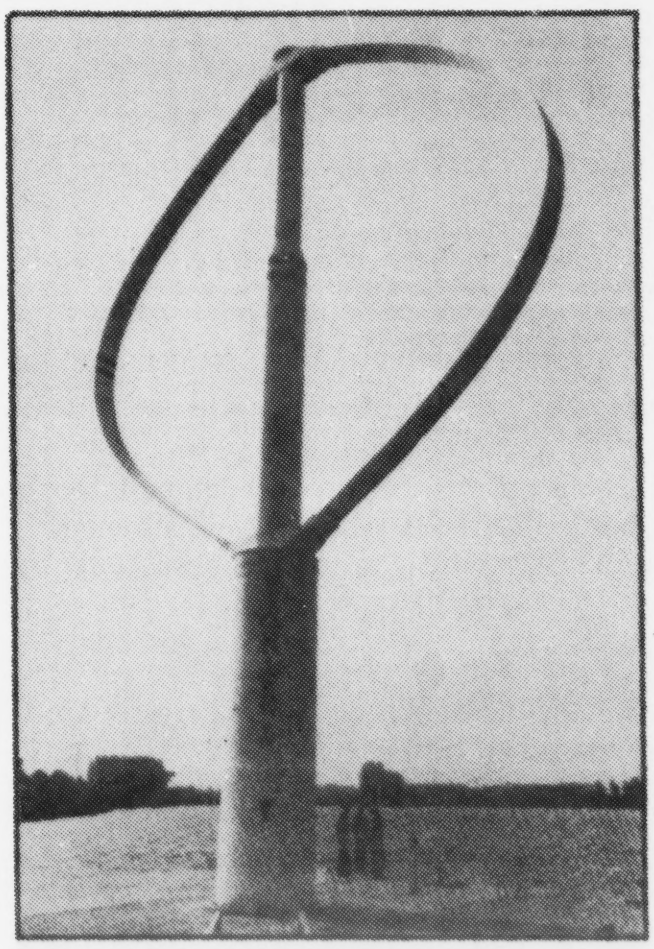
HEXHAM, ENGLAND — Wind consultants here are making it possible for nomadic Mongolian herdsmen to make tea — no small feat on the barren steppes of the central Asian country.

The Northumbran Energy Workshop (NEW), a design consultancy and workers' cooperative incorporated in 1979 and specializing in small-scale alternative technology, has developed a modular battery-charging wind generator and energy storage system to bring electricity to the herdsmen for the first time. The advance is possible only because the system can be easily dismantled and transported by animal.

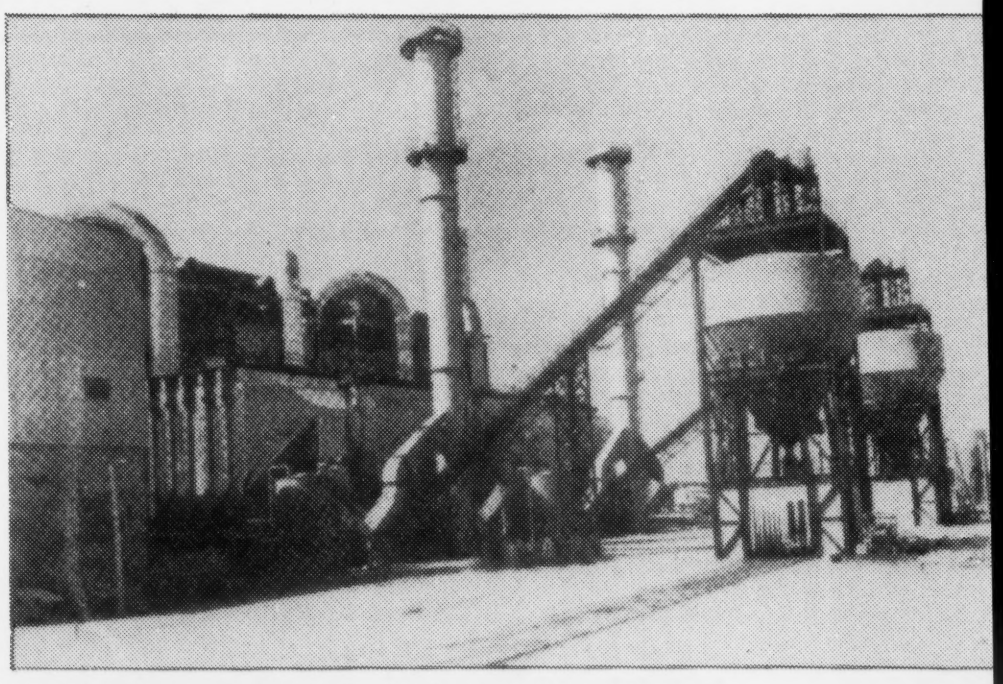
Normally heavily dependent on Soviet aid, the government of the People's Republic of Mongolia turned to NEW to help improve the lot of its desert people last year, asking the cooperative to design the portable system and hinting at orders in excess of 20,000 units if the design proves successful.

—***Renewable Energy News***



AMSTERDAM — Towering over its floating platform in nearby Gaasperplas, this fiberglass-bladed, 50-foot (15-meter) diameter Darrieus generates up to 100kW. Since its erection in March, 1982, the unit has operated flawlessly in wind speeds up to 55 miles (90 kilometers) per hour.

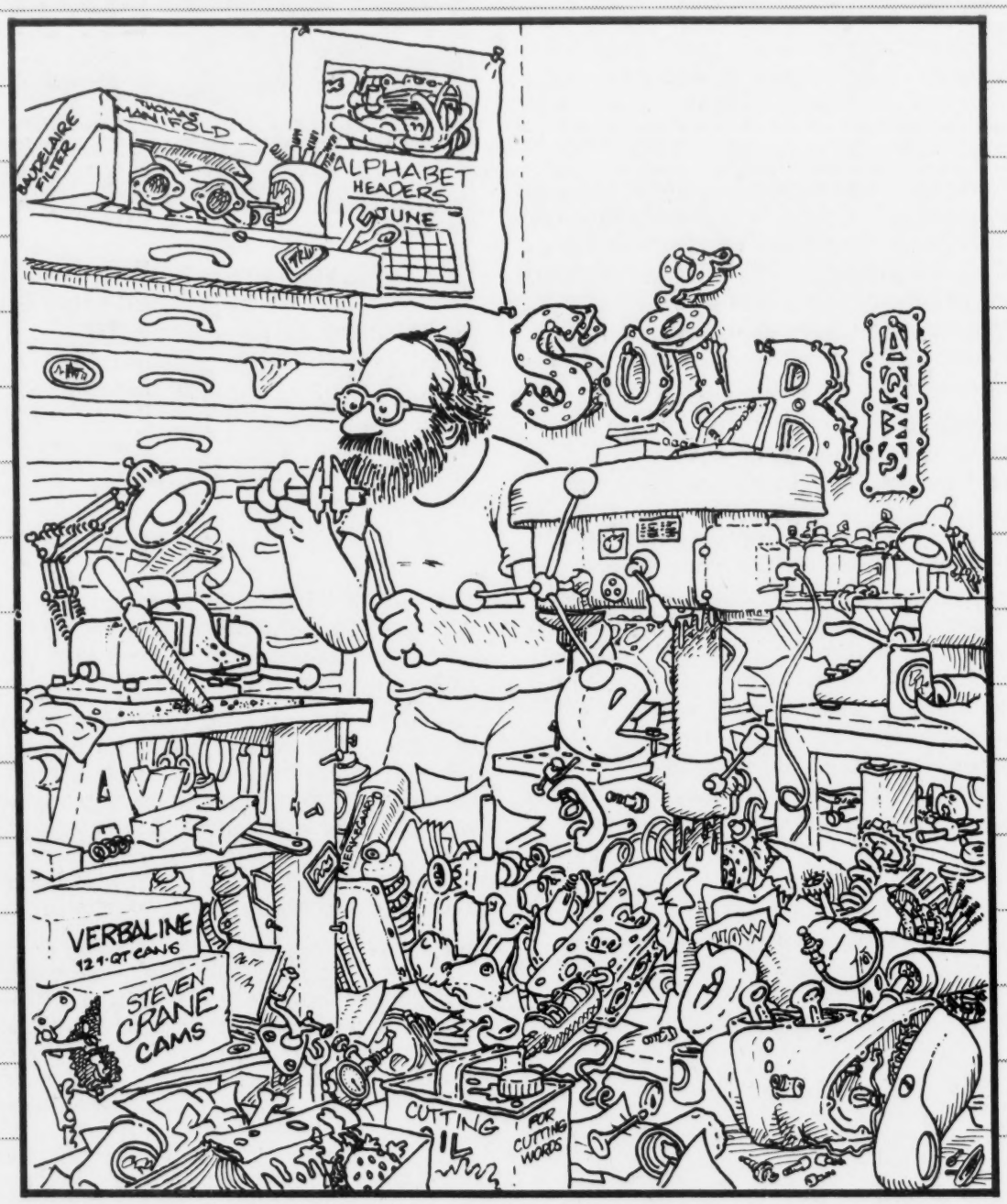
—***Renewable Energy News***



The power generating facility (at left) is the biggest money-maker for Resource Recovery's solid waste processing plant. Steam turbines, running on refuse-derived fuel, generate electricity, which is sold to Florida Power & Light. Silos, at right, store boiler ash which is sold to local cement manufacturers as filler for cinder blocks and for road construction.

—***Alternative Sources of Energy***

The Difference Between Writing



1. When you're writing, your last step is to throw away everything you don't like.

2. In writing, the small parts are always the same, but the large shapes change every time. Next time you will use the same letters and even the same words. In racing, the overall design usually stays the same, but the little stuff is different every time. If I raced books instead of writing them, I'd have to start with a given book design, and then try to make it work better than anyone else had. I'd have to work over the word *and* to make it fit just a little better, be a little lighter maybe. I'd have to make sure I got the best *and* to start with. Somewhere in between big and little is a place where the work on books and engines is similar.

Harry Ingham recently graduated from the University of California graduate writing program, and is currently a freelance writer. Larry Ingham had five engines in this year's Indianapolis 500. —*Jay Kinney*

3. Nobody calls you up and tells you that you have to do overtime because his old novel blew up and he has nothing to read.

4. The people who claim they can build better engines on LSD are relatively rare, although the number who claim they can do it better on uppers is about the same.

5. All engine-building is nonfiction.

6. Engine-building skills and experience are invisible, but the tools are visible.

7. Almost anyone can write a little.

8. At a party, if you say you are a racing mechanic, people will ask you about racing, while if you say you are a writer, people will tell you about writing.

9. In a collaboration, a racing mechanic is more help to a writer than a writer is to a racing mechanic.

and Building Racing Engines

by Harry and Larry Ingham *Illustrated by James Donnelly*

10. A racing mechanic knows whether he's unemployed or not.

11. While he's at the peak of the day's moment of work, the exact time when he is full of himself, and can make or unmake the work of the day, of the week, of his life — at that moment, the mechanic gets asked by the boss if he's busy. The writer relies on his loved ones to do this.

12. Racing mechanics sometimes get scalded, deafened, or stuck with tiny metal slivers. Writers are often driven to drink or screaming, but then so are engine builders.

13. There is an exact list of the people who will blame you if your engine blows. If your novel inhales its valves, people will be pissed, but you'll never meet most of them.

14. Racing people get free T-shirts.

15. When asked a question that goes to the heart of his art, each one looks down and shrugs, but the engine man shrugs bigger shoulders.

16. A writer can bullshit himself and everyone right in the middle of his art form. For a mechanic, the bullshit, if he does it, has to be outside the work. There are agreed standards for racing engines: they should propel the car fast, and hold together. A writer can tell himself his slow, rickety work is good, and he may be right.

17. Burned-out racing mechanics fix Chevies at your corner gas station; burned-out writers quit art altogether.

18. There are almost no women racing mechanics, which is bad for racing. There are almost no racing mechanics on TV, which is good for racing.

19. There are no Indy-engine schools, but a good talent can find a way to work with a master. In writing, very few work with masters, but schools abound. Neither system of training works very well, and perhaps neither should.

20. Nobody publishes reviews of a mechanic.

21. A mechanic can have his tools stolen.

22. In racing, there is no being good by playing at being bad, there is no teasing.

23. There are people alive who have met the first racing mechanics. There are no racing engines chiseled in ancient obelisks.

24. Engine builders are divided between Republicans and Democrats.

25. Writers talk more, and sometimes better.

26. Writers like writing letters, sending angry notes, and sometimes even filling out questionnaires. A racing mechanic hates fixing his own car.

27. Writers, given their head, will talk about taxes, how to survive on a small variable income, and getting laid. Racing mechanics will talk about getting laid and smog devices. (They're for getting laid and against smog devices. They have good reasons for both, which you need to know.)

28. Writers who have an inspiration can get up in the middle of the night and write it down. Racing folk have to try to keep the golden moment until work tomorrow.

29. A real mechanic can drive to the market feeling his engine's concatenated explosions and steel twisting in grease. When a writer learns to do this it gets in his way; he can't read newspapers or talk to his kids without words forming into chunks and stopping his listening.

30. Perplexity takes the same amount of time, but when he's sure, a writer can go fast, and come back to clean up later. If he wants.

31. Nobody ever left a bundle of racing engines, with instructions to his family to destroy them when he died.

32. Racing engines make noise here and now.

33. Both go to the same bars after work, but some of the writers think they're slumming, or perhaps doing research.

34. You've already done the job well, but there's a deadline, and it's time to take the job one step higher. The way to decide which profession you want is to decide whether you would like to do that in a half-darkened shop or at home, growling at the kids to keep them away.

35. Some writers go to meetings.

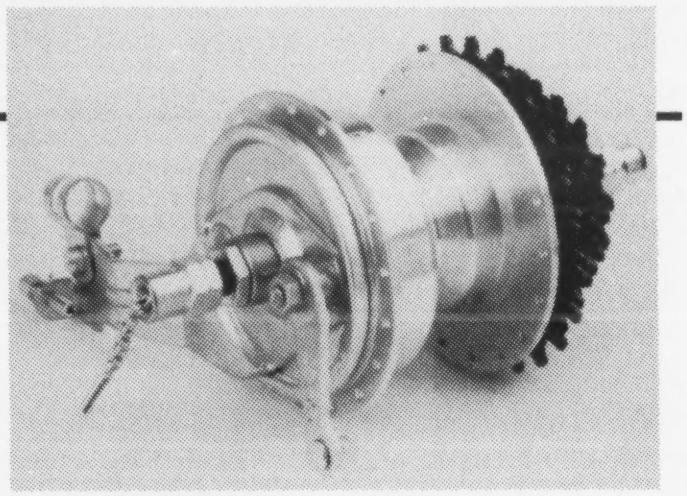
36. Innovations in racing can be tested by asking, does the thing go faster?

37. When the competition makes a change, the writer has to avoid it, like the horns of the bull, holding in as close as he can. The racing mechanic has to decide whether to use it. Oscar Wilde thought it was all right for him to steal from others, because he improved their work. On the other hand, those who stole from him were criminals, because their work was inferior. No such conflict could exist in racing. ■

Sachs Hub Brakes

Here comes the lone bike rider through the morning mist downhill towards the locked gate. For a moment, the wonderful smell of the perfect morning takes the rider's attention away from something important (or soon to be important) — rim brakes don't work very well wet. There are remedies for wet nonbraking, but most of them have been inordinately heavy. Here's a set of hub brakes, indoors, out of the weather where they belong, fashioned mostly from aluminum. You can get the rear one with or without three-speed internal-shift hub, freewheel-and-sprocket stack, or two-speed axle. The hubs are heavier than the equivalent without brake, and the total weight of the hub braking system is a bit heavier than the usual alloy rim brake sets. You expected maybe a miracle? Looks to me like standard equipment for mist riders and other wet bikers. —J. Baldwin

[Suggested by Prof. Dr. H.E. Lessing]

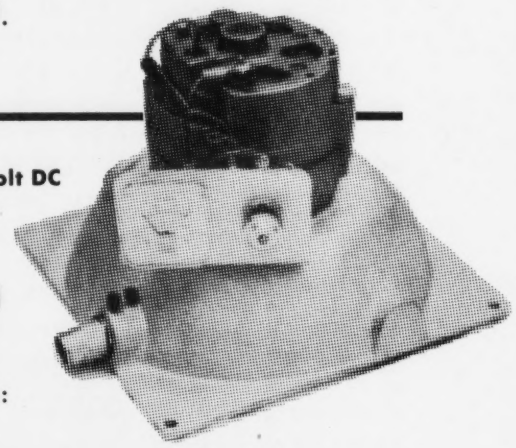


Sachs Hub Brakes
Information **free** from:
Sachs Motors Corp. LTD.
c/o Mr. Horst Kempter
9615 Cote de Liesse Rd.
Dorval, Quebec
H9P 1A3 Canada

Micro Hydro

Usually when you see this term, it's referring to something rather less imposing than Hoover Dam but still well out of mind for the do-it-yourself crew. One reason for this has been the lack of really small hydro/generator sets that can make use of streams barely able to float a medium trout. Now you have a choice. I have no idea of the durability of any of these, nor do I intentionally slight any others not mentioned. Good sense will tell you that some sort of shelter for these rigs will be necessary — alternators don't like running under water. You'll have to use good sense about the supply piping too. (Stopping the water coming at you down a half-mile of pipe can result in an amazing explosion if you don't do it gradually.) Some sets I've seen probably have inadequate bearings — there's a lot of difference between running a few hours a day warm and horizontal under a car hood and running day in and day out vertically and damp. Time will tell what's best. Meantime, these machines are simple, easy to service (including bearings), and remarkably cheap compared to just about anything else of this output. I've talked to the designers of these examples, and all seem competent and genuinely interested in giving you good watts. Don't be fooled by the tiny size — these things work. They're all about $500, plus pipe. Each has advantages and disadvantages for a given site; you'll have to work it out. —J. Baldwin

Vertical Axis 12-volt DC Pelton Generator
—Harris Hydroelectric



Hydro Charger I
$600 (approx.)
Nearest dealer
information **free** from:
Independent
Power Company
12340 Tyler Foote Road
Nevada City, CA 95959

Watter Charger
$610 postpaid
nearest dealer
information **free** from:
Burkhardt Turbines
P.O. Box 1436
Ukiah, CA 95482

Harris Hydroelectric Systems
$500 — $800
(approx.)
Information **free** from:
Harris Hydroelectric
632 Swanton Road
Davenport, CA 95017

Summit Controls Wind Data Logger

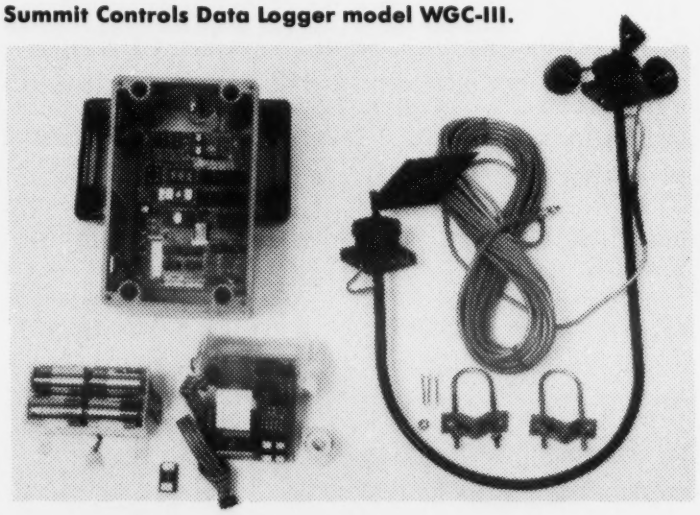
Know what's the most common disaster affecting windpower? Hard to believe, but erecting the machine where there isn't sufficient wind is the problem. The books all tell you to be sure and keep away from trees and buildings, and to check with your nearest airport for local wind availability patterns. That isn't enough. My own experience shows that moving the tower a mere 100 feet in apparently open country can make a big difference. That leads me to conclude that airport data isn't reliable unless you live at the end of the runway. A wet finger isn't reliable either. In fact, many wind data loggers aren't useful.

The type that merely totals the run of wind past the instrument and presents the day's average wind velocity can be way off. This is because the power available in the wind rises as the cube of wind speed. Thus, an "average" wind speed of 12 mph means modest power if the wind is always blowing 12, but it means lots of power if the wind blows 24 mph half the day, and doesn't blow at all the rest of the time. A 2 mph discrepancy in your data can mean as much as a 35 percent difference in your actual "wind power." So what's needed is a data logger that tells you not only windspeed, but how long it blew how much. Here's one that does. There are others available. I don't know which is best, but I do know that anyone with a questionable site for a wind machine had better buy or rent one of these things. —J. Baldwin

Summit Controls Wind Data Logger
$895 – $1295

catalog **free** from:
Summit Controls Corp.
1215 High Street, Ste. 103
Auburn, CA 95603

Summit Controls Data Logger model WGC-III.



Human Power

The International Human Powered Vehicle Association, now about 1000 strong, includes a subscription to this newsletter with your membership. There's a lot going on these days. Recently a streamlined tandem, the Vector, averaged a bit more than 50 miles per hour for 40 miles on a public highway. The speed record so far is a bit more than 60. Folks are also at work on boats and small aircraft. I really like this sort of thing, as it demonstrates so obviously the innovation-suppression of "sanctioning bodies" — the world associations that sanction records and various racing activities. In the case of bicycles, the Union Cycliste Internationale has regarded any deviation from the standard racing bicycle as "cheating," thus effectively removing most motivation for improving a design that has remained pretty much the same for more than 75 years. Now, at last, there are folks taking matters into their own hands. They have their own sanctioning body: IHPVA. It doesn't look like this outfit will be suppressing innovation in the foreseeable future; they'll accept any vehicle solely powered by people. While bicycle magazines will keep you up on the IHPVA news, this little paper keeps you up on what's going on around the world, and how it's done — the inside story. —J. Baldwin

[suggested by Kevin Kelly]

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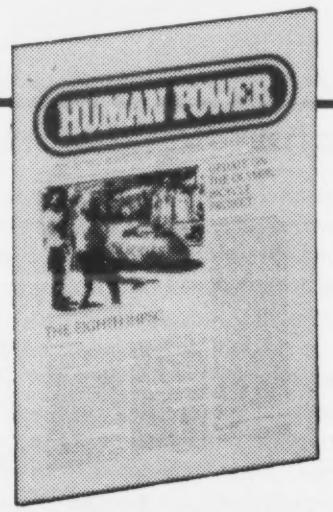
After seven years of Human Powered Vehicle races there were increasing concerns that the race-winning vehicles continued to be quite impractical. At the 8th IHPVA Speed Championships, Allan Abbott organized a new competitive event which was not a race; it was a judging of the most practical human powered vehicles. The rules were purposely kept simple and the judges were selected to represent an informed marketplace. They included a mechanical engineer (IHPVA founder Chet Kyle), a seasoned bicycle racer (Ron Skarin), and an experienced bicycle-riding grandmother (Mrs. Jean Boor).



Human Power
Richard L. Hargrave, Editor
$15/year (4 issues; includes IHPVA membership) from:
International Human Powered Vehicle Association
P.O. Box 2068
Seal Beach, CA 90740

The judges each rode the vehicles on a winding parking lot course and on a straight speed course. They completed scoring sheets on each entry and scored the following categories: comfort, safety and stability, speed, ease of entry and exit, ventilation and weather protection, and utility and ability to carry light cargo. . . .

A new production prototype tricycle was entered by Aerocoupe Cyclecars, 537 S. Raymond St., Pasadena, CA 91106. Aerocoupe is now offering the vehicle for sale for $750 in kit form. Our grandmother judge rated this entry highest. It has two steering wheels forward and the single driving wheel behind the rider. This configuration is much like the Vector except that the front wheels are placed much wider apart, thus giving it stability to please a grandmother. The judges liked its parking brakes and gave it top marks for ease of entry and exit and stability — they seemed to love high-speed "drifting" through corners. Despite its extremely low profile and its width which would seem to make this tricycle relatively unsafe in automobile traffic, our judges scored the Aerocoupe second.

Japanese Woodworking Tools

The Western love for things Japanese includes woodworking tools and attendant mystique. I've heard it said that the finest Japanese tools are beyond the skill of Western craftsmen to use properly. Part of the problem is that it is relatively easy to put a chisel in a box and ship it across the ocean, but much more difficult to transport knowledge of the handling, care and lore that are part of any tool.

The author of this book has a nice blend of Eastern tradition and Western savvy. The trade he learned in Japan was making sliding doors, but for the past 25 years he has worked and taught in America. The book is full of his own line drawings, good photographs of him using the tools, and a loving attention to detail. —Richard Nilsen

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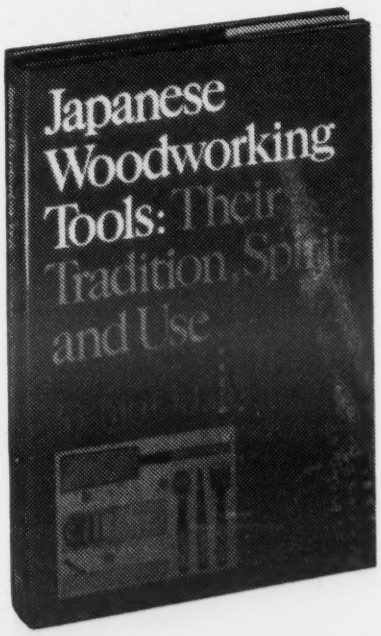
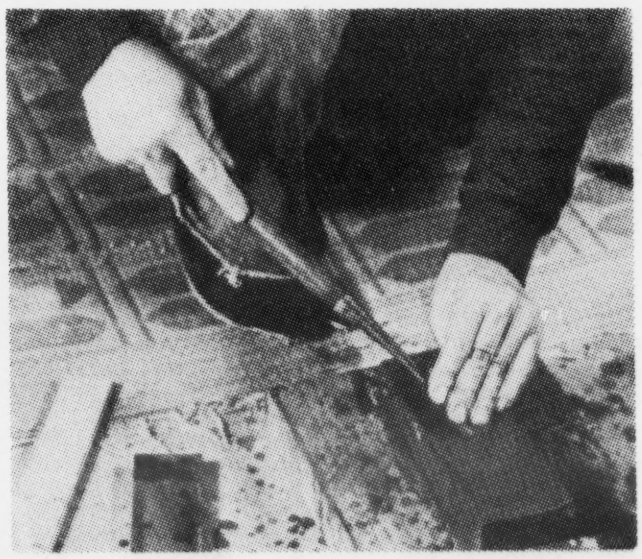
For any type of Japanese tool, there are about three levels of quality: the low level (inexpensive tools of low quality), the middle level (reasonably priced tools that are well forged), and the high level (extremely expensive tools of the highest quality). . . Most *shokunin* [craftsmen] depended on middle-level blades forged by common blacksmiths. . . . Almost any kind of woodworking at that time depended on these middle-level tools.

Today, however, many sophisticated, small power tools are common in society. Naturally, *shokunin* use them, and to some extent they have taken over the job of the middle-level tools, leaving society the very cheap or the very expensive tools. In addition, many of the middle-level tools that are being produced are made to look like high-level tools—dramatic signs are put on plane blades, saw handles are wrapped with cane in a *samurai*-sword pattern and fake temper marks are put on sawblades.



Japanese Woodworking Tools
(Their Tradition, Spirit and Use)
Toshio Odate
1984; 240 pp.
$19
postpaid from:
Taunton Press
P.O. Box 355
Newton, CT 06470
or Whole Earth Access



Chisels are sharpened in much the same way as planes, held at the same angle to the stone. The further up the handle you hold the chisel, the more control you have, and the easier it is to maintain the bevel angle.

Kerosene Heaters

Nine million Americans have expressed their confidence in kerosene heaters by buying them in recent years. Authoritative articles have been written reinforcing the intelligence of all those buyers. Yet equally authoritative articles have been written calling the heaters things that go boom in the night, and have encouraged laws (mostly unenforceable) against them. The heater industry has thus been buffeted by controversy and rumor, and consumers can't find out what's right. Now they can. The same author who brought us the commendably straightforward ***Don't Get Burned*** *(Winter '82* ***CQ****) has again cut through the hoohah to give us the basics. It's written in plain talk, too: you needn't be a mechanic. Nice work in these days of publishing 500-page $20 tomes to get across a few simple facts.* *—J. Baldwin*

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Precise adjustment of the wick height is critical to the safe and efficient operation of a heater. A wick that is *too low* will not allow the kerosene to vaporize correctly. This causes "low burning," a situation of uneven heating in the burner assembly which causes the metal parts to warp out of shape. This distortion then causes excess air flow which creates a dangerous "flare up" condition. The first sign of low burning is a strong odor. Also, low burning doesn't allow complete combustion of the fuel; this may cause pollution problems.

A wick that is *too high* will burn with a noticeable red flame, will produce smoke, and will cause unpleasant odors and fumes. This is a waste of fuel and may cause the wick to wear out very rapidly.

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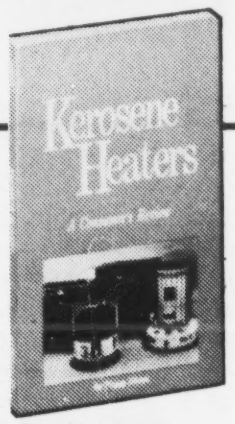
Scented additives are potentially hazardous, also. As mentioned in the previous chapter, a strong or unpleasant odor is one of the first signs of trouble in a kerosene heater. If this odor is masked with perfumed additives, your heater could be severely damaged (and you could be subjected to unhealthful levels of pollutants) if the heater continues to operate incorrectly. When the fuel is vaporizing correctly and burning at maximum efficiency, you will notice virtually no odor. There is a slight odor when you light it and when you turn it off as the vaporization process begins or ends.

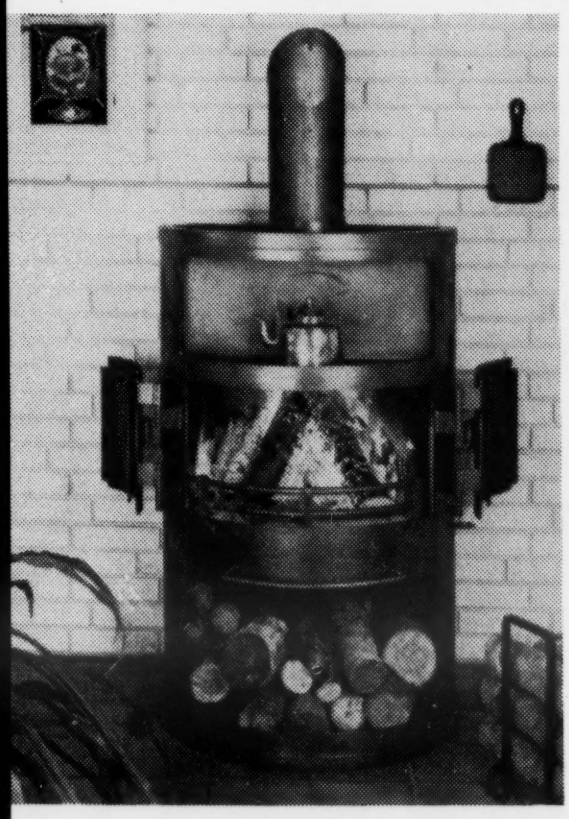
The bottom line on additives: they are an added expense, they do not produce more heat, they may or may not work as intended, they may or may not be safe from a fire standpoint, an emission standpoint and a maintenance standpoint.



Kerosene Heaters
Peggy Glenn
1984; 89 pp.
$3.75
postpaid from:
Aames-Allen
Publishing Co.
924 Main Street
Huntington Beach,
CA 92648 or Whole Earth Access

DSA Pejse stoves

Why is it that most presently available woodstoves look like they were fabricated around 1850, probably as part of a locomotive? That old-fashioned appearance, which was a styling gimmick then, now has a faddish appeal unconnected to any particular mechanical merit. Most attempts at being "modern" merely mix the old and the new into a characterless entity, much as motel lobby design has a little of everything so anyone can feel at home. Well, these stoves are unashamedly modern in every way. They convert from fireplace to 70 percent efficient burners of wood, coal, or what-have-you; are double-walled convectors; are substantially made from noncorroding Cor-Ten steel — 300-400 pounds of it. They have a good reputation in Europe. To me, they look nicer than just about any others. *—J. Baldwin*



DSA Pejse stoves
$1300 and up
catalog **free** from:
Unique Heat, Inc.
P.O. Box 1528
Mill Valley, CA 94942

Dana combined fireplace and woodburning stove.

Architecture and Community

This posh celebration of modern Islamic architecture presents the winners of the first Aga Khan prizes for successfully combining traditional forms with modern needs. Some of the work shown is expectedly a reflection of typical Big Budget efforts, and as such will only be interesting to those involved in such schemes. But there are also fine examples of work done on a more human-crafts-level scale. These I find instructive, for it isn't easy to combine the old with the new and get away with it. My favorite is a school made by its students who at the same time learned various trades and developed a building method that can be used for a variety of other structures. Might be we ought to try things like that here? The shapes and spaces depicted are just plain wonderful, as is the book's production.
—J. Baldwin

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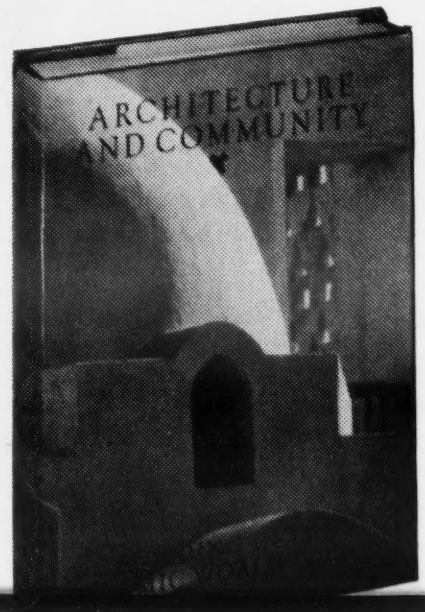
In 1975 a vault supported on low, bearing walls was built in an open lot in the city of Dakar, Senegal. It was built by D'Iallo, a mason, using sand and cement alone, without the addition of expensive imported wood or steel elements. The idea of introducing the vaulting technique to Senegal had been promoted by a group of architects from a United Nations agency. For them this prototype represented the successful first phase of developing inexpensive building systems. Placing it on an accessible lot in Dakar as a demonstration piece was the beginning of the second, implementation, phase. A

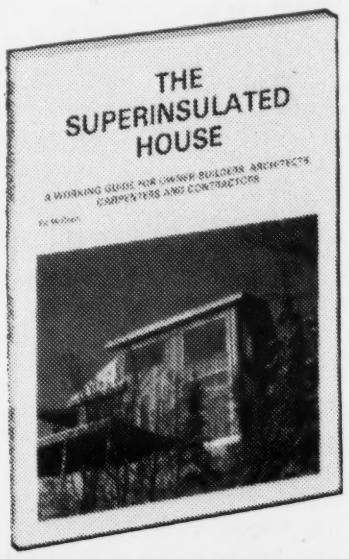


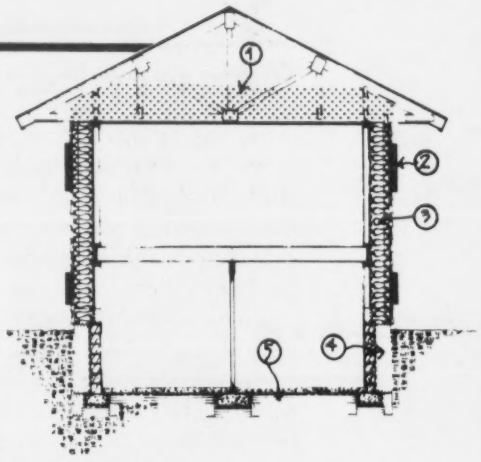
Architecture and Community
Renata Holod and
Darl Rastorfer, Editors
1983; 255 pp.
$21 (paperback)
postpaid from:
Viking Press
299 Murray Hill Parkway
East Rutherford,
NJ 07073
or Whole Earth Access

The Superinsulated House

*Ed McGrath published his first book on this subject in 1978 (**NWEC** p. 234). It was pretty general, but it was one of the first attempts at presenting useful information for builders in very cold climates. The present book is filled with solid, well-illustrated details — all from experience of the toughest sort. The basic principles are explained in terms that anyone should be able to understand — one good way to help spread the Word. For many folks, books "born in the field" as this one was are more useful than those born in laboratories.* —*J. Baldwin*

The Super-insulated House
Ed McGrath
1982; 103 pp.
$11.95
postpaid from:
That New
Publishing Company
1525 Eielson Street
Fairbanks, AK 99701
or Whole Earth Access





ONE HOUSE, FIVE INSULATIONS: 1. Blown-in cellulose in roof. 2. Urethane shutter panels. 3. Fiberglass batts in walls. 4. Beadboard on underground wall. 5. Styrofoam under slab and footer.

There is no "best insulation," unless we're talking about a specific application. You choose what is the best insulation for each job by matching up material properties with design requirements.

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SAWDUST & SHAVINGS

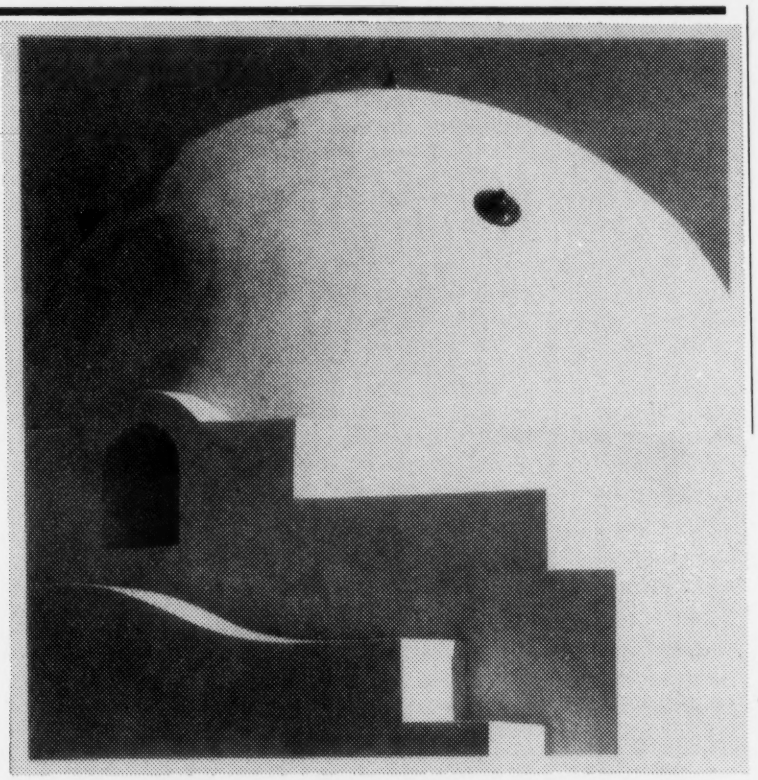
Sawdust is rated at R2.6 per inch of thickness. That number will vary with density and moisture content.

Since it is a byproduct of lumber mills, sawdust can often be gotten for the hauling, or cheaply.

Sawdust is extremely flammable, and needs to be isolated from living spaces by sheetrock or equivalent. It would seem that it could be mixed with fire retardant and made less hazardous. Sawdust is attractive to animals and insects. That problem may be solved with physical barriers, or seemingly could be solved with chemicals. Sawdust will rot if it gets wet; it requires a vapor barrier and protection from other moisture. It settles, which presents a problem for use in walls. Some people tamp it as they pour it into place.

Sawdust is used presently, and has a long history of use, as residential insulation. Double walled houses with sawdust filled cavities were once common in the North, and are now seeing a revival. Generally, sawdust can be used in place of any other loosefill insulation. It has been used in the ground, where it rots after a few years and must be replaced. Because of its low cost, it deserves consideration as a temporary insulation. When it begins to rot, it can go into the compost pile. Spruce sawdust is acidic, and needs to have lime added before putting on the garden.

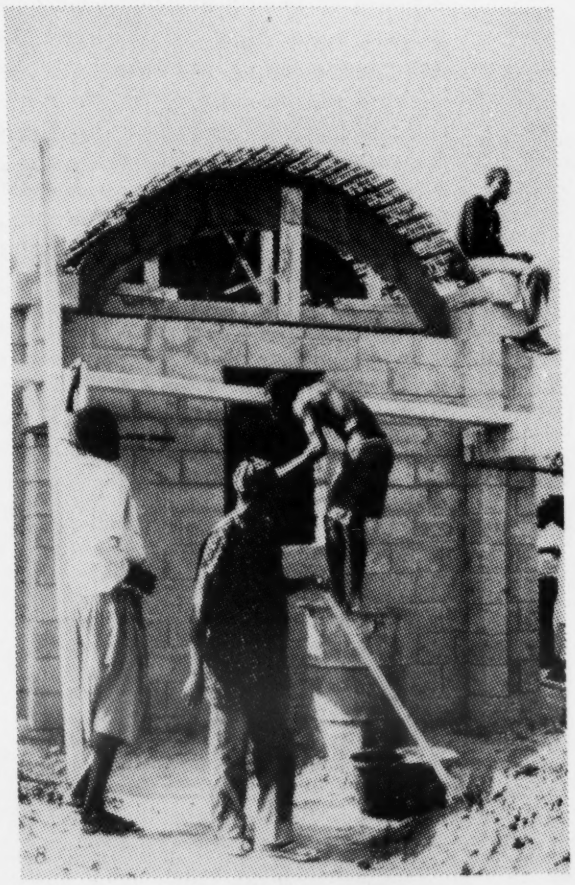
Wood shavings are a useful insulation, and have most of the general properties of sawdust. The R value per inch is a bit lower. Shavings are best compacted a bit when poured into a wall cavity.



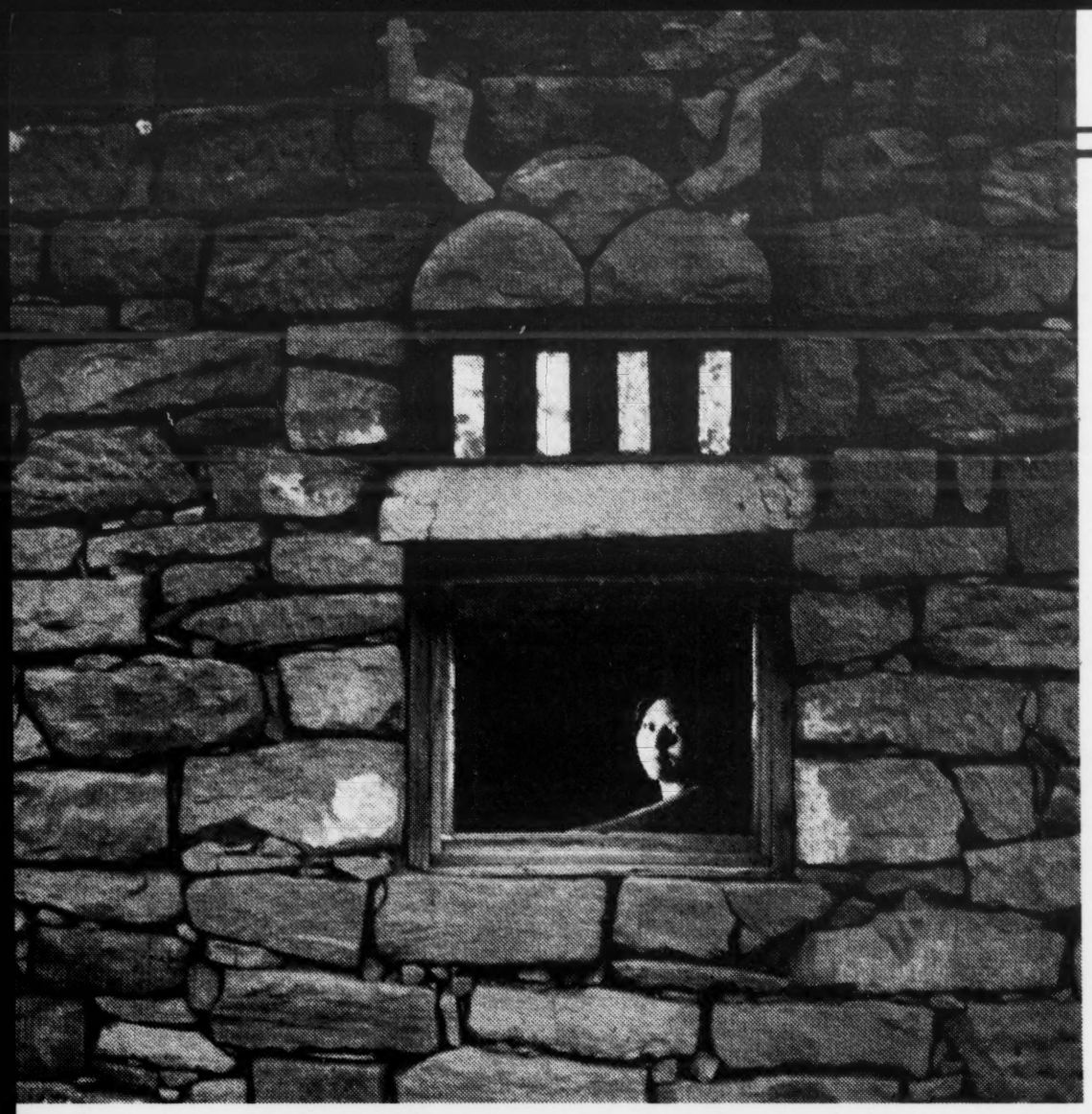
Halawa House, Agamy, Egypt. Completed April, 1975.

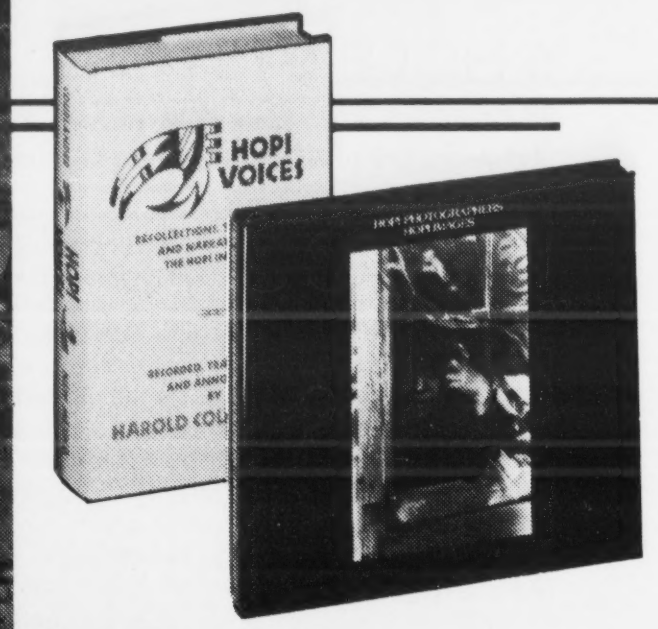
resident of Nianing, Florentin Diouf, saw the model and envisioned an application of the prototype for the housing of an agricultural school he was planning for Caritas, a social-welfare organisation. Diouf contacted the prototype sponsors, BREDA (a UNESCO Regional Bureau for Education in Africa), and thus Caritas and BREDA joined forces in the making of the Nianing Agricultural Training Centre. It was to become an experiment in regional self-sufficiency. . . .

The first construction phase — building the student dormitories — brought about the greatest number of innovations. With priority given to developing masonry skills, the BREDA architects supervising the work found it necessary to reject inadequate workmanship. Some walls were demolished and reconstructed to assure quality. Contrary to local practice, the masonry was left exposed, free of all finishes. This was done not only to reduce costs, but to encourage quality in the production of the bricks and in the bricklaying. . . .



Constructing vaults at Nianing. For this experiment in regional self-sufficiency, both skilled and unskilled labour were recruited from the area. Construction provided the workers with training. Several men who began as common labourers rose to the status of mason during the project.





Hopi Voices
Harold Courlander
1982; 224 pp.
$17.50
postpaid from:
University of
New Mexico Press
Albuquerque,
NM 87131

Both books
from
Whole Earth
Access

Hopi Photographers/ Hopi Images
Victor Masayesva, Jr.
and Erin Younger
1983; 111 pp.
$14.95
postpaid from:
University of
Arizona Press
1615 E. Speedway
Tucson, AZ 85719

Photograph by Owen Seumptewa, *Hopi Photographers/Hopi Images*

Hopi Voices • Hopi Photographers/Hopi Images

Ever since 1870, when the "Report of the Commissioner of Indian Affairs" appeared, there has been a steady stream of photographs and books about the Hopi Indians. The Hopis, who live on three isolated sandstone mesas of the Colorado Plateau in northeastern Arizona, are among the most independent and self-contained Native American tribes. They are also one of the most scrutinized. Unfortunately most of the scrutiny has been done by non-Hopis.

Again and again outsiders have imposed their own views on Hopi myth, history, and reality. At the turn of the century photographers like Edward S. Curtis and Adam Clark Vroman saw them as a "vanishing race" and tried to romanticize them as such. More recently Frank Waters has tried to take an ancient surviving culture and turn it into a philosophic model for the world. By 1915 outsiders had become so disruptive that most villages banned the photographing of ceremonials, and to this day most individual Hopis tell whites what they think they want to hear.

Now, with the publication of two recent books, we have an opportunity to hear and see a bit of Hopi culture from the inside. ***Hopi Photographers/Hopi Images*** *displays the work of seven contemporary Hopi photographers. Collectively they carry a spirit and tone that is far different than can be found anywhere else. (Just take a look at the overproduced* ***Hopi*** *by Susanne and Jake Page to see how much can be missed.)*

There is a sensitivity here that speaks of what is important and permissible to record. Hundreds of years of tradition have given these artists a clear sense of the necessary balance between their individual goals and the needs of the community which sustains them.

Hopi Voices *is Harold Courlander's fifth book about the Hopis, and it's his best. Courlander is one of the world's most active and accomplished folklorists, with over 30 books to his credit. He's been collecting oral literature and music for more than half a century in places as diverse as the Caribbean, the Far East, Africa, and the United States.*

In this collection he's gathered 73 narratives and memories from Hopi informants over a period of ten years, a few of which are available in other printed versions. However, what makes this collection special is that the texts are all recorded literally as Courlander heard them. They remain "unadulterated by the views of other Hopis, and in the literary sense, unmanipulated for effect. Each informant tells only what he himself recalls, knows, or believes."

Creation and origin myths, tales of transformation, adventures, and trickster tales, as well as individual comments on Hopi tradition and history (check out a Hopi's view of the "Hippie Invasion" of '67) are all included. One informant declares, "A white man will . . . never understand a Hopi. He can live his whole life in the village and not understand us. You have to be born a Hopi and raised a Hopi to understand how we think. Almost everything we do is a religious act, from the time we get up to the time we go to sleep. How can the white man ever understand that?" The answer probably remains that he can't, but listening to the people telling their own stories in ***Hopi Voices*** *is a valuable beginning.*

—Steve Sanfield

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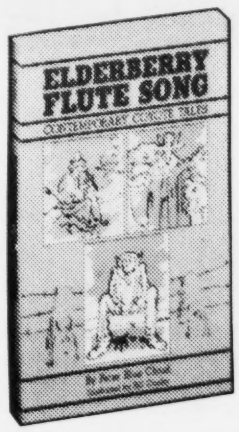
There was that time when the hippies came over here and sort of took over the village, as if they owned it. They just camped in the plaza and went around, going into people's houses and things like that. We didn't want them but they refused to go. Shongopovi people had to avoid them by going inside and closing their doors. Those hippies offended our way of life. They hugged each other and kissed in public as if they didn't have anything else to do and nowhere else to go. I went out there and spoke to some of them. I said, "Why are you here? Why do you behave this way, doing anything that comes into your head? We do not like the way you are behaving. It's not our way. It's improper."

They said, "What's wrong with what we are doing? We

Elderberry Flute Song

It's not only that Coyote has survived the steel traps and the cyanide bombs, agribusiness and the housing projects, and that Coyote old man of trickster tale is surviving the death of peoples and cultures who once knew him well, but it's also the case that Coyote trickster has more than enough life, gives more than he takes, instructs and unwraps us. Would-be new natives of North America have picked up on Coyote and given him place in many a contemporary book of poetry. But Peter Blue Cloud (Mohawk) is a first-rate poet in the English language (graphic artist as well), who gives us here the first totally new, creative, freshly invented or discovered book of Coyote lore from a Native American. It runs from true tales of creation to the conversations and meditations of a pair of coyote skins hung on a barbed-wire fence. This is America, Turtle Island, alive and laughing. —*Gary Snyder*

Elderberry Flute Song
(Contemporary Coyote Tales)
Peter Blue Cloud
1982; 142 pp.
$7.95
postpaid from:
The Crossing Press
Box 640
Trumansburg, NY 14886
or Whole Earth Access



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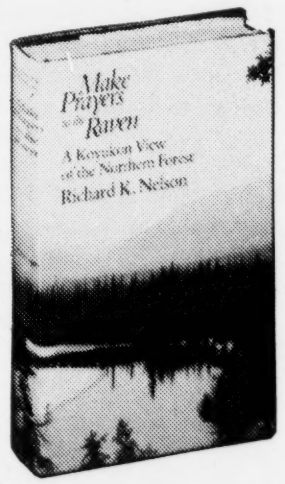
A NEW DANCE
Fox: I don't want to die.
Coyote: Well, not many do.
F: But someday I'm going to die.
C: So's everything else.
F: You mean when I die?
C: Sure. Maybe everything is your dream.
F: You really mean *everything?*
C: Why not? It's your dream, isn't it?
F: So I guess I'd better stay alive a long time, so everything doesn't end, huh?
C: (Musing aloud) I wonder if I'd just disappear if I killed him?
F: (Giving up) And I wonder why I dreamed you so mean? Well, go ahead and kill me. You're gonna anyway.
(So Coyote killed Fox)
C: (Looking around in wonder) Well, I guess he was wrong. But I wonder who is the one carrying everything in a dream? Here comes Grandson. Maybe he knows. Hello, Grandson, how is everything?
G: Grandfather, I've been thinking of dying. Do I have to?
C: Please, Grandson, think of something else. Think of living. Look at Fox over there. He started thinking of dying and just fell over dead.
G: Okay, Grandfather. Let's skin him out and use his hide for a new dance.
C: (Looking at us) And that's how we used to make new dances in the old days . . . sometimes.

Make Prayers to the Raven

Richard Nelson, an experienced-in-the-field arctic ethnographer, has done a kind of first here. We've had ethnobotanies and ethnogeographies, etc., but in this book — the fruit of 16 months with the "Koyukon Athapaskan" people of the central Yukon basin — he has written a native natural history of the people. Insects, plants, fishes, birds, big mammals and small mammals, each is presented in its existence as living actual animal or being, and also as the character it is in myth and story. From how it is sung, to how it is tanned or cooked, is covered here. From story and song to the cookpot or fleshing frame: the aesthetic, spiritual, economic, and survival arts are all one graceful fabric in this deep but modest evocation of the old ways. Nelson makes his disclaimer, that we must not draw conclusions about other cultures from his experience with the Koyukon, but one needn't do too much comparative reading to know that the world view presented here belongs to the majority of our far-flung circumpolar Eurasian/North American friends and ancestors. There are plenty of cautions here too. The Dené, or "People," are intensely conscious of their manners and the many little things that give offense to the whole system, or to an individual species. The wild old world is an elegant, careful, mannerly world.
—*Gary Snyder*

Make Prayers to the Raven
(A Koyukon View of the Northern Forest)
Richard K. Nelson
1983; 292 pp.
$25 postpaid from:
University of Chicago Press
5801 South Ellis Avenue
Chicago, IL 60637
or Whole Earth Access



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Aside from their spiritual significance, perhaps the voices of the little birds mean most to the Koyukon people. Indeed, these provide inspiration for their own spring and summer songs (*too k'ileek*, literally "water songs," because water is the warm-season metaphor). Many bird calls are interpreted as Koyukon words, their meanings derived from events in the Distant Time, events recalled in stories that make the bird's phrases clear. What is striking about these song words is how perfectly they mirror the call's pattern, so that someone who knows birdsongs can readily identify the species when the words are spoken in Koyukon. Not only the rhythm comes through, but also some of the tone, the "feel" that goes with it.

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One of the principles emerging from the Koyukon ideology — perhaps the basic principle — is that a moral system governs human behavior toward nature. The proper forms of conduct are set forth in an elaborate code of rules, brought down from the Distant Time. Through this code, deference is shown for everything in the environment, partly through gestures of etiquette and partly through avoiding waste or excessive use.

In the Koyukon world, therefore, human existence depends on a morally based relationship with the overarching powers of nature. Humanity acts at the behest of the environment. The Koyukon must move *with* the forces of their surroundings, not attempting to control, master, or fundamentally alter them. They do not confront nature, they yield to it. At most they are able to placate and coerce nature through its spiritual dimension.

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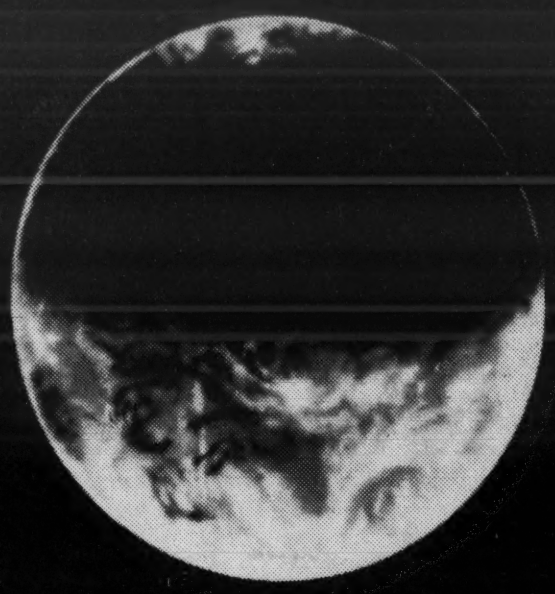
are here because we're on your side. You have been put down by the establishment, and we are against the establishment." I told them, "No, you are not on our side. You don't behave well. Whatever you want, you take it. Whatever you want to do, you do it. There are rules in the world. You can't be just anything you want." They said, "The rules are wrong." I said, "Don't you believe there is a Great Spirit somewhere that created us and is watching us?" They said, "No, we don't believe it." I said, "Well, then, who created you? Do you think you created yourself?" They didn't say anything. Finally the Hopi police came and made them get out.
—***Hopi Voices***



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Nuclear Winter

The Inside Story

by Paul R. Ehrlich

The large-scale rapid collaboration of scientists is understandably rare — it's a slow, fine-grinding individualistic craft they exercise usually. Only great consequence, universally perceived, can bring them together. The last time it happened that comes to my lay mind is the Manhattan Project, the race for the atomic bomb by America during the Second World War. How symmetrical that the race described here is to understand the true 40-years-later consequences of that first race.

Paul Ehrlich has been professing population biology at Stanford University since the 1950s, when I had the privilege to be his student. Since I borrowed a concept he co-authored with botanist Peter Raven (who is prominent in the article) to title this magazine, we've stayed in touch, and Paul routinely sends me his reprints. This one from **Amicus** *I grabbed.*

I have been hearing from other sources that the Department of Defense is taking the Nuclear Winter scenario quite seriously, in part for what it does to "Second Strike" doctrine. Second Strike is a nuclear combatant's response, if any, to a massive First Strike by the enemy. You're supposed to have a plausible Second Strike capability — hardened silos and such — or you're perceived as inviting a First Strike. Nuclear Winter asks, "What if the First Strike **IS** *the Second Strike?" Massive attack is its own retaliation. Herman Kahn's "doomsday machine" has been blowing in the wind all these years.*

—Stewart Brand

IN THE PAST, THE HORROR OF THERMONUCLEAR warfare for most has been the prospect that almost half of humanity would be killed or seriously injured within a few hours. Now, there is growing realization that this would be only the beginning and that a much worse fate would lie in store for people and other living beings on our planet. Human survivors of World War III could find themselves in the clutches of a "nuclear winter," freezing and choking in a smoggy darkness, exposed to extremely high levels of radiation, hungry, thirsty, and without hope of succor. After a large-scale war, civilization in the Northern Hemisphere almost certainly would be doomed, and millions of species of plants and animals would become extinct. If the impacts of the war were severe in the Southern Hemisphere, the very survival of the human species would be at stake.

This new understanding of the risks of the nuclear arms race fills us with dread. But coming to this understanding was, in itself, an interesting and hopeful process. Among other things, it involved a lot of busy scientists who put aside their more parochial interests to do something directly in the cause of *Homo sapiens.* That in itself is a cause for cheer, for if a substantial portion of the global scientific community can be rallied to oppose the nuclear arms race, our chances of survival will increase greatly.

It has been evident to ecologists for at least a decade that the potential environmental consequences of a large-scale nuclear war were being underestimated or ignored in government-sponsored evaluations. A 1975 National Academy of Sciences study of the long-term worldwide effects of multiple nuclear weapons detonations, for example, failed even to mention many of the ecological problems that would result.

But until very recently, there has been little interest in the problem. My closest colleagues, my wife Anne, senior research associate in biology at Stanford, and physicist John Holdren, of the Energy and Resources Group at Berkeley, and I had grown frightened by the evolution of nuclear weapons policies away from deterrence and toward the possibility of waging nuclear war. Holdren, who is a major figure in the Pugwash movement and the Federation of American Scientists (both organizations deeply concerned with the arms race), communi-

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CENTER ON THE CONSEQUENCES OF NUCLEAR WAR

The most moving event at the recent Conference on the World after Nuclear War was an hour and a half satellite television conference between American and Soviet scientists, known as the "Moscow Link."

cated to Anne and me his growing apprehension through the early 1970s as first the Americans and then the Soviets began refitting their intercontinental ballistic missiles (ICBMs) with multiple warheads, a process which goes by the acronym MIRV (multiple independently targetable reentry vehicles). In an attempt to call attention to risks being ignored in an increasingly unstable arms race, the three of us wrote a section on the ecology of thermonuclear warfare for our 1977 textbook **Ecoscience**, and Anne and I put one in **Extinction** in 1981. But none of the many dozens of reviews of these two books so much as mentioned the topic.

Then the bellicosity of the Reagan administration and the Euromissile debate galvanized broader interest in the environmental consequences of a nuclear war. The process of researching them in detail could be viewed as a series of embarrassments for me and other scientists. In **Ecoscience**, for example, we stated:

> Blast effects and huge fires burning in the Northern Hemisphere would send large amounts of debris into the atmosphere, conceivably dwarfing the volcanic and pollution effects previously discussed. The entire climate of the Earth could be altered, especially since large holes would probably be punched in the ozone layer.

In **Extinction** we added, among other things:

> It is not unlikely that the effects of weather change also would be felt in the poor countries of the Southern Hemisphere, threatening their already inadequate agricultural base.

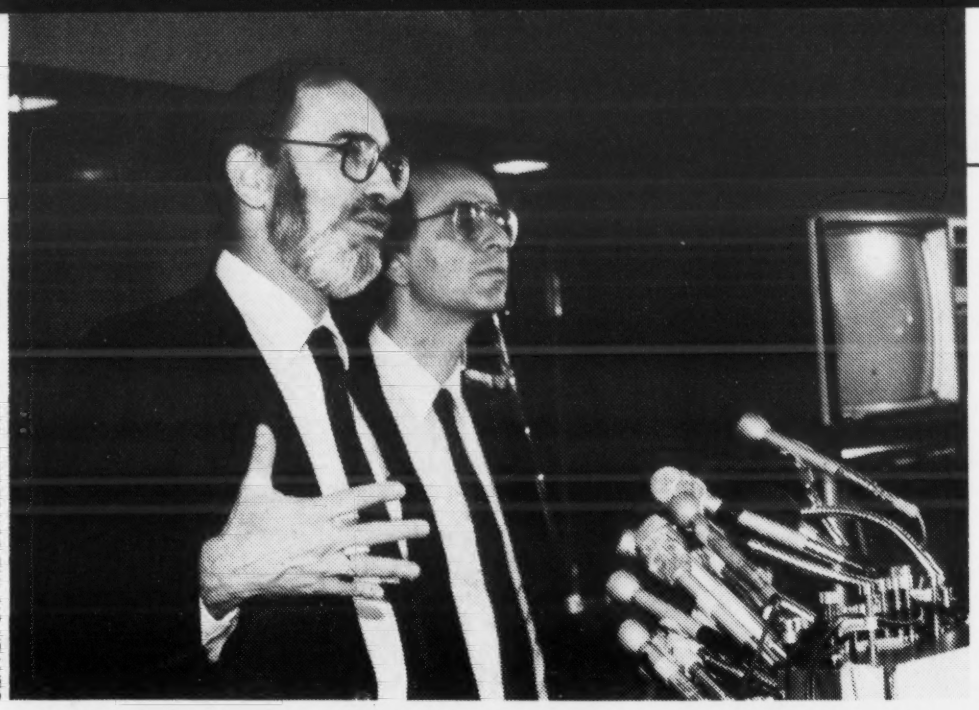
But we were thinking of climatic shifts of the sort that would cause crop failures, not the drops in midsummer temperatures to 40 degrees or more below zero that now are known to be possible. I am embarrassed to admit that we did not even do any back-of-the-envelope arithmetic that might have indicated the true magnitude of the atmospheric effects.

Instead, pioneering calculations on the amounts of junk that would be injected into the atmosphere by a nuclear war were done by Paul J. Crutzen, of the Max Planck Institute for Chemistry in Mainz, West Germany, and John W. Birks, of the Cooperative Institute for Research in Environmental Sciences, University of Colorado, and published in a 1982 special issue of **Ambio**, the journal of the Royal Swedish Academy of Sciences. They also took a first cut at estimating the characteristics of the smog that would engulf the Northern Hemisphere and dealt with the consequences that would flow from the depletion of atmospheric ozone.

Although Crutzen and Birks did not estimate the possible magnitude of the climatic effects, things were starting to come together. Interest in climatic effects of dust clouds had been studied in other contexts. For example, in 1980 it was theorized that the extinction of the dinosaurs had been caused by dust clouds raised by the collision of an asteroid with the Earth. The basic idea was that the clouds might have blocked out the sun's rays, stopping photosynthesis, leading to the collapse of food chains, and starving the giant reptiles.

Partly stimulated by this proposal, by the work of Crutzen and Birks, by telescopic observations of dust storms in the Martian atmosphere, and by ongoing research on the climatic effects of volcanic dust, a group of scientists began the now-famous study of the global atmospheric consequences of a nuclear war. The team consisted of Richard Turco of R & D Associates of Marina del Rey, California; Brian Toon, Thomas Ackerman, and James Pollack of the Space Sciences Division at the NASA Ames Research Center; and Carl Sagan of the Laboratory for Planetary Studies at Cornell University. The study, completed early this year, has become known, after the initials of its authors, by the appropriate acronym of TTAPS.

The TTAPS group used a series of computer models to investigate the impact of the injection of dust, smoke, radioactive isotopes, and other materials into the atmosphere. A large number of reasonable (often conservative) assumptions were made about such things as the fraction of detonations causing widespread fires, sizes of fires, duration of burning, heights of smoke plumes, optical properties of dust and



CENTER ON THE CONSEQUENCES OF NUCLEAR WAR

Paul Ehrlich of Stanford (left) and Carl Sagan of Cornell (right) played key roles in bringing world attention to the Nuclear Winter consequences of nuclear war.

soot, and the quantity of dust swept into the clouds. These assumptions were fed into a computer and combined with scenarios of various patterns of nuclear wars.

The key TTAPS climatic models investigated the behavior of materials moving vertically in the atmosphere. Horizontal movement was "parameterized" — which means that arbitrary assumptions about the spread were built into each model. One approach, for example, was to assume that each cloud grew in area according to a certain mathematical function of the sort used to describe diffusion, the gradual mixing of molecules of two or more substances (in this case soot and dust in air).

While the TTAPS study was progressing, other developments were taking place. A consortium of foundations, led by the W. Alton Jones Foundation, decided to sponsor a conference on the long-term worldwide biological consequences of nuclear war. Its purpose would be the education of decision makers and the general public. A steering committee was established under the leadership of the distinguished ecologist Georg Woodwell, director of the Ecosystems Center of the Woods Hole Marine Biology Laboratory. Woodwell is an expert on the effect of disturbances on ecological systems, and in the 1960s did classic work on the environmental impacts of radiation.

At the time, I was working on a chapter on the ecology of nuclear war for **The Counterfeit Ark**, a book sponsored by Physicians for Social Responsibility, on the Federal Emergency Management Agency's insane "Crisis Relocation Program." My sense of urgency on the issue had been increased greatly by the Crutzen-Birks results. They had come as a shock to the biologists who knew of them (**Ambio** is not read by most life scientists), for those results had truly frightening implications. The direct impacts of low light and toxic smog on ecosystems were bound to be disastrous, and there would be severe climatic effects from the Crutzen-Birk veil of debris as well. I recruited my friend Stephen Schneider, of the National Center for Atmospheric Research, to help me evaluate those possible climatic effects. A leading atmospheric physicist, he had a long-term interest in the impact of climate on agriculture; he too found these effects frightening.

I thought my chapter painted a pretty grim picture. To be certain that I was not overstating the dangers, I circulated my manuscript to a large group of ecologists, including Woodwell. I received many helpful criticisms, but my colleagues agreed with the chapter's major conclusions. Then, at the suggestion of Schneider and Thomas Eisner, a biologist at Cornell, I sent it to Carl Sagan. Sagan responded that it was "much too optimistic," an accusation I rarely have to face. Of course, he was right.

In January the pace quickened. A group of biologists, including Woodwell, Eisner, Peter Raven, director of the Missouri Botanical Garden, and me, were in Washington, D.C., discussing the escalating rate of extinction of Earth's flora and fauna. We were invited to stop by the conference offices and meet with its executive director, Chaplin Barnes. The project had already enlisted Carl Sagan and the other TTAPS physicists and climatologists in Cambridge to review the TTAPS work. Barnes wanted to organize a meeting of biologists immediately afterward to consider the biological effects of the projected atmospheric changes.

The notion of setting up an important conference in less than three months was appalling, but we all thought that the seriousness of the issue made it imperative. Everyone agreed, however, that these meetings should be closed to press and public. Great harm could result if conclusions were released before they were reviewed thoroughly or if speculation were mistranslated into fact. Raven, one of the busiest biologists in the nation and one of the leaders in the battle to save tropical rain forests, was prevailed upon to accept the task of organizing the meeting. The rest of us promised to help.

Others were like-minded. About 70 of the nation's top scientists were concerned enough to drop everything and converge on Cambridge in April. For two days, the TTAPS results were given intensive scrutiny by some of the toughest possible critics including Schneider, who specializes in climate modeling; Holdren, whose detailed knowledge of arsenals and arms control qualified him to evaluate the TTAPS war scenarios; Crutzen and Birks; George Carrier from Harvard, who was then just about to chair a new U.S. National Academy of Sciences committee on the atmospheric effects of nuclear explosions (the Academy had recognized the inadequacy of its earlier study); Vladimir Aleksandrov of the Laboratory of

This painting and those on the following two pages accompanied Paul Ehrlich's presentation at the Conference. Here, nuclear explosions near oil and gas storage facilities pour toxic chemicals into rivers, killing natural aquatic life.

Paintings by Rob Wood of Stansbury, Ronsaville, Wood Inc., 1983. Courtesy of Open Space Institute, Inc. and the Center on the Consequences of Nuclear War.

Climate Modeling of the Soviet Union's Academy of Sciences; Jerry Mahlman, an outstanding atmospheric dynamicist from Princeton; and Robert Cess, an expert in radiative transfer from the State University of New York at Stony Brook.

TTAPS' basic conclusions went unchallenged, even though everyone present had hoped that they would prove to be too pessimistic. *It appeared that even the explosion of a 100-kiloton warhead over each of a thousand cities (a 100-megaton war) could bring on a nuclear winter — and that would mean the detonation of only about one percent of the combined present American-Soviet strategic arsenals (some 10,000 megatons).* Results of 5,000- and 10,000-megaton wars, both plausible in the foreseeable future, would be, of course, much more severe. The Northern Hemisphere would be veiled by soot and dust for most of a year and temperatures would be tens of degrees below freezing in the continental interiors for many months. The thermal inertia of the oceans would keep them relatively warm, so that a sharp temperature gradient would be established between them and the frozen continents. This, in turn, would cause violent storms in coastal regions.

As much as 30 percent of the Northern Hemisphere land area could receive 500 rads or more of radiation within 48 hours — enough to kill more than 50 percent of the exposed healthy adult human beings and to be lethal to many other mammals and susceptible plants (such as coniferous trees). And a toxic smog, generated as forests, refineries, coal and oil stocks, and plastic-filled cities burned, would bathe the Northern Hemisphere.

There was considerable discussion of problems that still are not resolved, such as the possible degree of patchiness in the debris veil and the potential for its movement into the Southern Hemisphere. Those factors could not, of course, be predicted with the TTAPS model, since it was one-dimensional with arbitrary assumptions made about lateral spread.

John Harte of the Lawrence Berkeley Laboratory, a theoretical physicist now doing research on acid rains and the properties of aquatic ecosystems, introduced some preliminary calculations showing that most bodies of fresh water would be frozen one to two meters deep. He also sparked a good discussion about a possible reduction of precipitation during the nuclear winter. Acid rains almost certainly would be caused by a nuclear war, but all agreed that their impact would be small in comparison to the other effects.

Next, in a long day following the physicists' meeting, a small committee of physical and biological scientists summarized the sobering conclusions for presentation to the biologists' meeting the next day. The biologists then considered the impact of the TTAPS physical changes on living systems. They had a grim two-day session — a discussion among 40 scientists about the end of the world, moderated by Peter Raven. The group was as diverse as it was distinguished. It included Ernst Mayr of Harvard, the world's leading evolutionist, Robert May of Princeton, a physicist transformed into an outstanding theoretical ecologist, Harvard's Stephen Gould of "punctuated equilibrium" fame and a geologist with a strong professional interest in past extinctions, Mohammed Kassas from Egypt, president of the International Union for the Conservation of Nature, John Teal, a wetlands ecologist from Woods Hole, and Thomas Lovejoy of the World Wildlife Fund, an authority on the effects of habitat fragmentation and present-day extinction.

The discussions were wide ranging. Rafael Herrera from Venezuela and Norman Myers from England, both ecologists working to preserve the tropical rain forests, outlined possible impacts on those great reservoirs that may hold almost half Earth's organic diversity. The rain forests in the Northern Hemisphere tropics seemed almost certainly doomed. Those in the Southern Hemisphere could be severely threatened both from the spread of the climatic effects of the war and from increased exploitation by local peoples after they are cut off from trade with the Northern Hemisphere.

David Pimental, an expert in agriculture from Cornell, and Anne Ehrlich reviewed a wide range of plausible effects on agricultural ecosystems and food distribution systems. Their comments added to the gloom. Growing crops, sensitive to both cold and darkness, would be destroyed throughout the Northern Hemisphere; distribution systems would break down; and food would rapidly become in short supply everywhere as Earth's major breadbasket, North America, was wiped out. The eventual reestablishment of agriculture there

Dead, dry conifers provide kindling for massive forest fires in the wake of nuclear war.

and elsewhere, if there were any human survivors of the holocaust, would face many severe difficulties.

Christopher McKay and David Milne from NASA presented modeling studies that showed the devastating effects of low light levels on phytoplankton and thus on the productivity of the sea. Harold Mooney and Joseph Berry, colleagues of mine at Stanford, and Fakhri Bazzaz of the botany department at the University of Illinois, all outstanding plant ecologists, detailed the overkill of plants implicit in the various atmospheric impacts projected by TTAPS.

So extreme were the forecast atmospheric effects that the biologists were able to reach a consensus with no difficulty — a rare event in science. With little or no sunlight over much of the Northern Hemisphere, subfreezing temperatures, levels of radiation far beyond those previously predicted, and a poisonous smog pervading, the result would be an ecocatastrophe unprecedented in human history. Growth of plants on land and in the sea would be halted and many or most of them destroyed. Food chains would be cut off at their bases and would collapse. Agricultural productivity would come to an end, and natural ecosystems would be ravaged.

After weeks or months, when the soot had settled out, the returning sunlight would be enriched by dangerous amounts of one kind of ultraviolet light, because the damage done to the ozone layer would be repaired very slowly. This would disorient or blind many animals, and would damage the photosynthetic apparatus of plants. But the overkill from the cold-dark-radiation-smog effects led the biologists to doubt that there would be much left for the ultraviolet light to damage. Similarly, they concluded that other serious ecological damage resulting from a nuclear war would be of little added significance after a nuclear winter.

The major uncertainty from the biologists' perspective was what would happen in the Southern Hemisphere. That, of course, would depend in part on how many nuclear weapons were detonated there, and how much the obscuring soot and dust moved south from the Northern Hemisphere. The atmospheric physicists thought substantial spread in that direction was likely, but were unable to be more precise than that.

There was a general feeling of dismay expressed by the biologists. So severe were the projected effects in the Northern Hemisphere that they were certain that, even if TTAPS were overpessimistic by a considerable factor, the outcome still would be an environmental disaster that in all likelihood would destroy civilization in the north temperate zone and wipe out a significant proportion of the populations and species of other organisms on the planet.

After the April meetings, there was a period of frantic activity as results were further reviewed and tested, and preparations made for announcing them to the public at the main conference, "The World After Nuclear War," scheduled for the end of October in Washington, D.C. Stephen Schneider's group at the National Center for Atmospheric Research started another study of climatic effects, using a three-dimensional global circulation model, one far more complex than that used by TTAPS. In the Schneider model, the smoke was distributed uniformly in the mid-latitudes of the Northern Hemisphere whereupon the model was able to predict how wind patterns would be affected. The model was unable to provide details about the redistribution of smoke, but all indications were that the smoke would be spread far and wide. Schneider's group concluded that short-lived streamers or patches of soot would be spewed randomly over the Earth, creating temporary "quick freezes" beneath them. Schneider calls it a "deadly weather roulette" that could create havoc in the Southern Hemisphere, even if no uniform veil covered it. Thus, although many of the details differed, the Schneider results confirmed the broad TTAPS conclusions with the addition of the quick freezes. Another independent study by Michael MacCracken and Joseph Knox at the Lawrence Livermore weapons lab also projected cooling of the same order.

We biologists, with a great sense of urgency, struggled to write up our conclusions for simultaneous publication with a summary of the TTAPS work. Ecologists Mark Harwell at Cornell and Herb Grover at the University of

As cold and darkness spread south from the Northern Hemisphere the great reservoirs of the earth's organic diversity, the tropical rain forests, are severely damaged. People in regions like Central America are forced to wander in search of food and shelter.

New Mexico, who already had been involved in a study of the ecological effects of nuclear war sponsored by the American Ecological Society, did yeoman work on this, as did Berry, Eisner, Harte, Raven, Sagan, and Woodwell. The TTAPS and biological papers were submitted to **Science** late in the summer, reviewed, revised, and accepted before the October meeting (they were published in the December 23 issue).

"The World After Nuclear War" is now history. The results of a truly extraordinary scientific effort were presented to the press, to a Congressional briefing, and to more than 700 attendees, including representatives of 46 sponsoring organizations (including the Natural Resources Defense Council) and supporting foundations. Donald Kennedy, president of Stanford University, former director of the Food and Drug Administration, and himself a distinguished biologist, gave a fine keynote address, bringing his expertise in risk assessment to this greatest risk of all.

Vladimir Aleksandrov attended with several Soviet colleagues and brought the results of new Russian studies that agreed with the Schneider group simulation and lent further support to the TTAPS results. Perhaps the most moving event was an hour and a half satellite television conference between American and Soviet scientists, known as the "Moscow Link." It was arranged in a matter of a few weeks, largely because of the dedication and great energy of Robert Allen of the Kendall Foundation, with the aid of Thomas Malone of the Holcomb Research Institute, Walter Orr Roberts of the University Corporation for Atmospheric Research, both of whom had close Soviet contacts, and others. The Moscow Link made the front pages of both **Pravda** and **Isvestia**.

American press coverage was extensive, in spite of the conference's proximity in time to the Beirut bombing and Grenada invasion — even though the only paper that carried the coverage on the front page was the **Washington Post**. Carl Sagan's well-deserved reputation as a media communicator played a major role in getting publicity for the work to which his contributions as a world-class scientist had been critical. **Newsweek** and **Time** made it a major story. Many radio and TV shows carried the story and interviewed various participants. The **New Yorker** did an impressive piece focusing on the media coverage itself. Why, it asked, was a prediction of the end of the world from a distinguished and international group of scientists not headline news in all the media?

To me, that the whole project was successfully completed seems nearly miraculous — indeed, at times Barnes, Woodwell, Allen, Russell Peterson, president of the Audubon Society, Robert Cahn, a journalist who is a former member of the president's Council on Environmental Quality, Jeannie Peterson, who edited the special **Ambio** issue, Patricia Scharlin of the Sierra Club, Thomas Stoel of NRDC, Robert Scrivner, director of the Rockefeller Family Fund, and other unsung heroes of the steering committee were working miracles. I hope it is not only my bias as a participant, and my pleasure at working with so many dedicated colleagues and good friends, that leads me to conclude that the essential goal of the enterprise will be achieved. Within the next year or so, I believe that decision makers in all nations will realize that thermonuclear devices are not weapons of war but implements of mass suicide.

With this information, the growing popular movement against nuclear weapons — one increasingly involving organizations of professional people — may at last begin to turn the tide against the arms race. Perhaps I may yet live to see the threat of World War III fade away. I might even see the trillions upon trillions of dollars now scheduled to be wasted upon weaponry, nuclear and otherwise, spent instead on the solution of pressing problems now facing humanity. For if we do not soon get human population growth under control; do not start to close the rich-poor gap; do not make substantial progress toward ridding our planet of scourges such as racism, sexism, and religious prejudice; do not cease the extermination of other life forms and learn to live with nature rather than trying to conquer it; then present trends will simply take us in 50 to 150 years where nuclear war could now take us in 50 to 150 minutes. Ending the nuclear madness is the first step, but it is only the first step.

Nuclear Winter Update for CoEvolution Quarterly

by Paul Ehrlich

Since the *Amicus Journal* article was written, the "Nuclear Winter" story has continued to receive international attention. Most of it has been favorable; some of the relatively limited negative comment, such as one letter to the *Wall Street Journal*, and an editorial in *Nature*, has simply been silly — reflecting, among other things, lack of appreciation of the level of biological overkill implicit in the TTAPS scenarios for a large-scale war. For example, the TTAPS results indicate that summer temperatures might be far below freezing for weeks over much of the Northern Hemisphere, while a drop of only 8-10° C could end grain production there.

This ignorance of basic biology is also revealed in documents concerning the nuclear winter extracted from the Department of the Navy under the Freedom of Information Act. They found it "impossible to understand" without further quantification why environmental conditions much less severe than those projected in TTAPS would still create a biological catastrophe. This is roughly similar to waiting for a mathematical analysis before grasping that flying a jet fighter into the face of a mountain at 500 miles per hour can be as catastrophic for the pilot as doing it at 1000 miles per hour. Interestingly, the Navy documents did indicate concern about a possible boomerang effect — that a nation launching a first strike might create climatic effects that would destroy itself, *even if the target nation did not shoot back.*

A great deal of effort by the National Academy of Sciences and individual scientists has gone into trying to find ways in which the TTAPS study may have been overly pessimistic. A number of possibilities for this exist, but none has been demonstrated with certainty. In contrast, virtually no one has systematically looked at ways in which TTAPS may have been too optimistic, even though there are many places where it might have painted too rosy a picture.

A brief consideration of risk analysis shows that, while trying to refine estimates of the probability of triggering a nuclear winter may be an interesting scientific enterprise, such refinements should make little difference to policy makers. The risk of an event is, at first approximation, the probability of its occurring multiplied by its severity if it does occur. In this case, the severity is unprecedentedly high — it is likely to end civilization in the Northern Hemisphere, and it could lead to the extermination of *Homo sapiens.* Since the second factor in the equation is so large, it makes little difference whether the first factor is a probability of .05, .50, or .95. To make an analogy, few sane persons would play Russian roulette for $10, even if the chance of hitting a loaded cylinder and blowing one's brains out were only one in a million.

The prospect of more than two billion immediate casualties (almost half of humanity dead or dying) was sufficient to persuade most people that no political objective could possibly be worth the risk of a nuclear war. The new findings about the ecological effects of such a war should reinforce that view, persuade the few holdouts who still think such wars can be won, and recruit into the antiwar movement people in nonaligned countries who used to think their nations might escape the worst consequences of a conflict. It is now clear that *all* peoples, and especially all decision makers, must do everything possible to reduce the chances of a thermonuclear war.

The major responsibility, of course, rests with the United States and the Soviet Union. Sadly, the leadership of neither superpower seems to have any interest in dramatically rearranging their relationships. One might hope that a Soviet premier could have the vision to, say, volunteer to contribute fleet units to a multinational force that included U.S. ships and was charged with keeping open the Strait of Hormuz. Or that an American president might announce a "no-first-use" policy, combined with steps such as removing the Pershing II MRBMs from Europe and cancelling the program to build MXs and put them in Minuteman silos — both extremely threatening deployments from the Soviet perspective. Such unilateral moves by Soviet or American leaders would vastly increase the security of their own nations by at least starting to reduce the risk of thermonuclear war.

Unfortunately, Americans can have only slight influence on Soviet leaders — but we have a great deal of say about U.S. presidents. Clearly the most important thing any American can do this year to help increase our national security and assure a livable world for his or her children is to give Ronald Reagan his much-needed retirement. *Any* Democratic candidate cannot help but be a vast improvement. If Reagan's revival-meeting view of foreign affairs does not lead to our demise in 50 to 150 minutes, then continuation of his environmental policies would produce the same result in 50 to 150 years. ■

The Coevolution of Climate and Life

*What a natural for this magazine. Our favorite buzzword, coevolution, being used to discuss our favorite topic — the Gaia Hypothesis we've been reporting on the turnings of for ten years. ("Gaia" is Earth's atmosphere/Earth's life perceived and studied as if it were a single organism, adapting to perturbations within and without — such as the conversion to oxygen-based life within, or the devastating blow from without of an asteroid 65 million years ago. The Gaia Hypothesis is credited to British chemist James Lovelock [gas chromatography, etc.] and American microbiologist Lynn Margulis [the symbiotic theory of eucarytic cell evolution, etc.] — 1973, "Atmospheric homeostasis by and for the biosphere: the Gaia hypothesis," **Tellus** 26:2. Also see **Gaia: a New Look at Life on Earth**, J.E. Lovelock, 1979, $4.95 postpaid from Oxford University Press, 16 - 00 Pollitt Drive, Fair Lawn, NJ 07410.)*

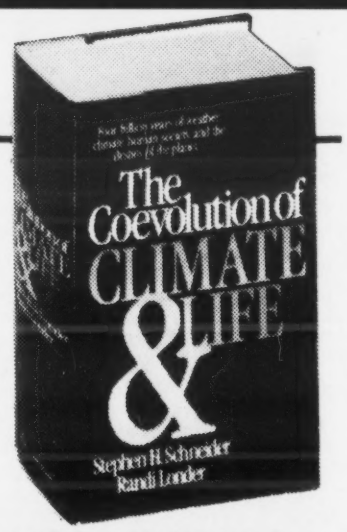
One immediately looks up Gaia in the index. Uh oh, one listing. Sure enough, there is a single page on the subject, in the very middle of this 563-pager. Schneider's analysis: "To Lovelock and Margulis, Gaia appears teleological (a philosophical term meaning purposeful). The implication is that somehow all of life is a directed organism that manages and evolves in its own environment while controlling its long-term destiny." A polite nod, and end of subject. The book is kinder to its typists than to its intellectual parents.

Teleological? There's no dirtier word in evolutionary biology, and climatologist Schneider knows it. (A teleological theory of the eye would claim that the organ is too complex to evolve by useful stages; it must have developed toward eyeness on purpose.) It's a bum rap on the Gaia Hypothesis, and if Schneider doesn't know that, he's been paying careful inattention. The operative adjectives of Gaia have been "homeostatic" — preserving variables within a constant range — and "adaptive," the routine behavior of life to preserve life against threats, including threats never encountered before. Lovelock and Margulis are even more aware than Schneider of the taint of "teleological" and have been at pains to steer clear of it.

Schneider makes scant mention of Lovelock and Margulis' analytic work on the topic, which is a shame, since it looks to me better than his — though there is much that is fascinating in the book and some that enriches the Gaian perspective. Back to the mythic models — what about his title? I'm uncomfortable with it, though Paul Ehrlich himself endorses it on the back cover ("I am very gratified to see how brilliantly the principle of coevolution, originating in population biology, has been applied to the entire Earth by Stephen Schneider"). To evolve, you must be capable of evolution — of adaptive response. Species evolve, maybe cultures do. I don't think stars do (though they certainly do something sequential, it is relatively predictable), and I don't think climate does. Climate, except as it may be steered by life, is a matter of forces and impacts — exactly the kind of physical constraint that "coevolution" was devised by Ehrlich and Raven to be distinct from. ("Steered by life" means the cybernetic usual away-from-trouble. "Good is a matter of opinion, bad is real," said Warren McCulloch. Life doesn't have opinions, doesn't steer toward things.)

Schneider's model is less good poetry and less good science than the Gaia Hypothesis. What shall we make of his treating it so slightingly? Professional jealousy? This deputy director of the Advanced Study Program at the National Center for Atmospheric Research in Colorado, a thoroughly worthy institution, has his own standing. And his reserve toward Gaia is hardly uncommon — it's the norm. I come back to a remark by British anthropologist Mary Douglas, which I quoted in the introduction to Love-

The Coevolution of Climate and Life
Stephen H. Schneider
and Randi Londer
1984; 576 pp.
$26.75
postpaid from:
Sierra Club
730 West Fairmont
Tempe, AZ 85282



*lock's Gaian computer model "Daisy World" (Summer 1983 **CQ**): "Why should people who are really worried about nonrenewable resources and irreversible damage to the environment take so little notice of a well-thought-out, optimistic message? . . . The competitive research tenders have to show that they can see the urgent problems and that their project might solve one of them. . . . That is why no one has had time to look at Gaia's hopeful scenario."*

*Stephen Schneider's previous climate book was **The Genesis Strategy: Climate and Global Survival** (1976). Half of the present book, published by Sierra Club, is devoted to human effects on the atmosphere, nearly all of it in dire terms. That's fine and useful . . . and purposeful. Schneider was one of the organizers of the conference on the "Nuclear Winter" (see p. 88), and his account of it in this book is even more detailed and valuable than Ehrlich's article. His sermons on economics I find familiar and tedious.*

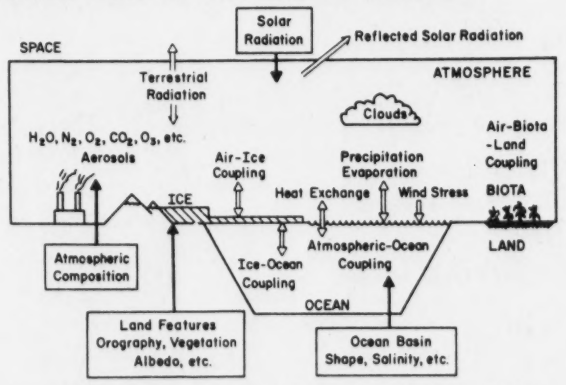
Schneider is a good liberal scientist.

Margulis and Lovelock are good radical ones. Less purposeful, less predictable, far more interesting. Gaia, meanwhile, remains the staunchest of conservatives.

—Stewart Brand

•

What has societal complexity and its relationship to democracy to do with the weather? We hope we've convinced you that, at least indirectly, the weather has quite a bit to do with societal vulnerability to shortfalls in food, water, and energy supplies. These vulnerabilities, in turn, are related to complexity and maintaining a vital democracy. The climatic connection becomes clearer when — because of special interests' pressure or average citizens' indifference or ignorance — societies permit food security margins to become so small that price instability and even famines can result from precedented climate fluctuations. Moreover, classic, market-oriented economic practices that do not internalize externalities or protect common property can lead to the erosion of soil, exclusion of pollution-caused health problems from the cost of doing business, or underreaction to the possible consequences of long-term climatic changes from worldwide industrial and land-use activities.



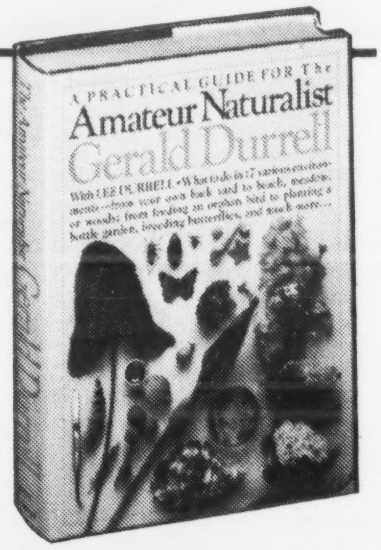
The climatic system of the earth consists of many interacting subsystems: the atmosphere, the oceans, the cryosphere (ice and snow), the biosphere (biota and their environment plus humans and their activities), the bottoms of the oceans, and some of the solid material below land and oceans. The interacting components of these subsystems are called the *internal* climate system, whereas those forces that drive the climate system, but are not an internal part of that system, are known as *external* forcing or *boundary* conditions.

A Practical Guide for the Amateur Naturalist

Mr. Durrell, one of the best-known naturalists, gives us 17 environments in color, and then tells us in easy detail what to look for in each. Be it grassland, pond, tropical forest, open ocean, or your own backyard, with this beautiful and inspiring book in your hand you'll feel at home. Mr. Durrell packs a wallop of hard information about population biology, evolution, climate and mimicry, and much more into pages filled with unusually useful and clear illustrations, both ink and photography. Here is how to tell the tree species of a hillside by their autumn colors, what and how to feed an orphaned bird, the proper blind for observing nocturnal wildlife. Most welcome of all he falls squarely in the camp of preservation, never letting the reader forget the difference between the naturalist and the invader. —*Sallie Tisdale*

[Suggested by Lisl Folsom]

A Practical Guide for the Amateur Naturalist
Gerald Durrell
1983; 320 pp.
$23.50
postpaid from:
Alfred A. Knopf
400 Hahn Road
Westminster, MD 21157
or Whole Earth Access



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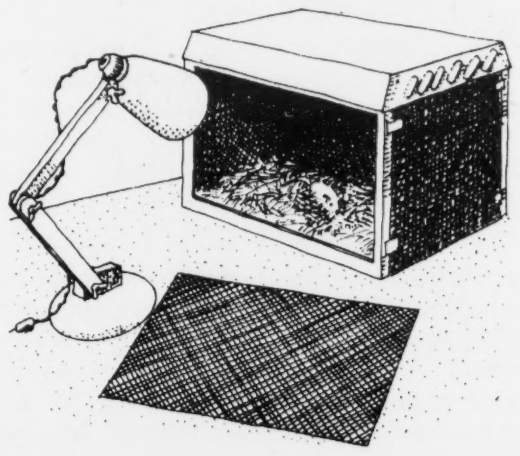
Pine Sawfly
The pine sawfly is notorious for the harm it does to pine woods. Canadian forests have suffered because of accidentally introduced European sawflies. The female lays eggs in pine needles with her saw-like ovipositor, and the larvae eat vast quantities of needles. Unlike the larvae of their relatives the wasps and bees, sawfly larvae look like caterpillars. But the pine sawfly larva has at least seven pairs of "false legs," as well as three pairs of "true legs," while a caterpillar has only two or three pairs of false legs.

•

Keeping nocturnal creatures
Use a cage that allows you to block out all the light during the day. You can paint the sides and make a wooden or cardboard cover for the front. To switch the light on and off a time switch is ideal, though you can control it manually. Look at the animals under a red bulb.

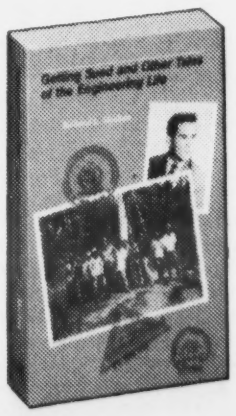


Getting Sued and Other Tales of the Engineering Life

Meehan's book is nine chapters, nine stories beginning with his freshman year at MIT in 1957. He goes in the army, he goes around the world to Thailand, he goes down the world to Chile. I could not stop following him. He really has no extraordinary adventures; what makes the book extraordinary is his power of observing and reflecting on himself and what happens around him. He has a special appeal as a subject since he seems to occasionally go out of control but never out of focus.

Maybe his years as a civil engineer investigating the stability of land to hold dams and support buildings have benefited his huge literary talents. There is something very special about these stories. The book has a shocking ending where he seems to promise the reader that he is finishing himself off in a lucrative dreariness in Palo Alto, but then if you remember the book's beginning you see that he thrives by taking turns others don't. —*Steve Baer*

Getting Sued and Other Tales of the Engineering Life
Richard L. Meehan
1981; 241 pp.
$6.95
postpaid from:
MIT Press
28 Carleton Street
Cambridge, MA 02142



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Scratch the surface of the Vallecitos dispute, of the whole issue of nuclear safety, of much of the present-day environmental controversy, and you find a social and political issue as old as Western civilization, a quarrel that predates and underlies current debates over corporations or radiation or the ecology, that transcends our technology.

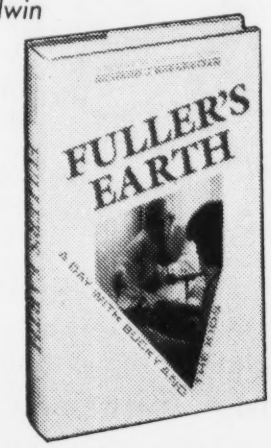
In this light the earthquake safety of the Vallecitos reactor is no more the real problem than the seismic safety of Pentheus's palace is the real subject of the Bacchae. In both cases the real issue is ideological conflict, little changed in two millennia. Symptomatic, perhaps, of the disintegration of a golden age of democracy. It is perhaps little wonder that we have difficulty in understanding each other, we engineers and you Friends of the Earth, for we are talking in metaphors, defined for us less by ourselves than by the events of our time. Our earthquake is a powerful but stupid beast that can be tamed with the sweet songs of Newton and Bayes. Your earthquake is a different matter; it is the almighty rage of a god.

•

I am not yet ready to write my report on this matter. There is a part of my mind, the logical, analytical part, that I imagine to be the mental analogue to my fountain pen (a heavy black Mont Blanc, its nib now gleaming gold and clean in the bluish light of my desk lamp). But there is another part of the mind that is the paper, sometimes smooth and white, but other times like tonight, a rough and fibrous stuff on which the fine line of writing blurs to unwanted shapes. That is the way it is tonight, after several false starts. And so I think it is not yet time to write a report but to reflect some upon this assignment to exhume from memory certain events and people and, having subjected them to examination, propitiate their ghosts. Only then can I return to this rational inquiry into the matter of sediment in Mica Creek.

Fuller's Earth

Shortly before his death in 1983, Bucky Fuller agreed to meet with two twelve-year-old boys and one ten-year-old girl to answer their questions and to teach them some of his ideas. Those of you who have heard him speak might well wonder if kids could comprehend Bucky — he was often a challenge to adults. But he does the deed so well here that this book becomes the best introduction to Fuller's thought yet seen. It's also the best look at the off-stage Bucky. Don't let the sixth-grade aim of the author put you off — he doesn't talk down to adults any more than Bucky talks down to the kids. It works. It's good. It's Book One for anyone interested in learning the basics of Fuller's thought. —*J. Baldwin*



Fuller's Earth
Richard J. Brenneman
1984; 180 pp.
$12.95
postpaid from:
St. Martin's Press
175 Fifth Avenue
New York, NY 10010
or Whole Earth Access

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Fuller:
Let's look at something else they taught you in school.

You've been taught to think in terms of "perpendicular" and "parallel," and in "x, y, z coordinates." These are all concepts based on 90°, based on a view of the world where the major relationships are at right angles to each other.

But Universe doesn't operate perpendicular or parallel. Universe operates the way you grow. You grow bigger in *all* directions from the center of your body, like a balloon getting larger and larger as more air is forced in.

So the words for our real Universe are *convergence* and *divergence*. That's how a wave operates.

Benjamin: What are the words?

Fuller: Convergence and divergence. To *converge* means to come together. *Verge* is Latin for "moving," and *con* means "together." To *diverge* is to move apart, *di* meaning "apart." That's how all wave phenomena operate. Drop a pebble in a pond, and the waves diverge out from the point where the pebble hit the water. Then the waves hit the edges of the pond and converge back toward the point of impact. Radar operates the same way, and so do sound waves. An echo is sound waves diverging, hitting an obstacle (like a mountain side), and then converging back again so that you hear yourself.

And with us, the way we use our minds, our interests diverge outwardly or converge inwardly. Sometimes we're concerned with world-around problems or interests, sometimes, with some intimate, personal, and private thing. So the way we think is convergent or divergent. We're attracted or repelled, "putting things together" or "tearing things down."

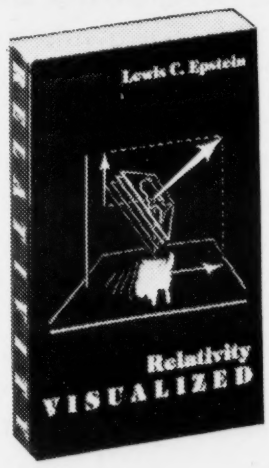
And this is also how we tune things, like a radio, a TV, or a guitar. We tune for exactly the wave we are looking for — the right station, channel, or note — by moving from one side of the wave or the other toward the wave length and frequency we're looking for.

So in our electromagnetic world of wave vibrations, there's no perpendicular or parallel. There's only convergent or divergent. That's the way she operates. So if we are looking for angles, we have to look for the angles of convergence or divergence.

Relativity Visualized

Nonmathematical explanations of relativity are about the only recourse to the nonmathematical among us (that includes me) who crave to understand it. I find this visualization book easier to internalize than others I've read, but this doesn't necessarily mean that you will—I expect that personal experience has a lot to do with which explanation will seem most clear. I'd give it a try if other authors haven't helped. There's still work involved too; no easy path for the lazy on this subject. The reward for your labor is a better understanding of what is really going on around you, much in the same way a geology course helps you understand the terrain at a deeper level than merely "hill" and "valley" and ***Conceptual Physics*** *(Summer '83* **CQ***) helps you achieve a sense of physics. In any case, I doubt if you're going to find a simpler or more friendly treatise on relativity, so have at it, folks.*
—*J. Baldwin*

Relativity Visualized
Lewis C. Epstein
1983; 200 pp.
$14.95
postpaid from:
Insight Press
614 Vermont St.
San Francisco, CA 94107
or Whole Earth Access



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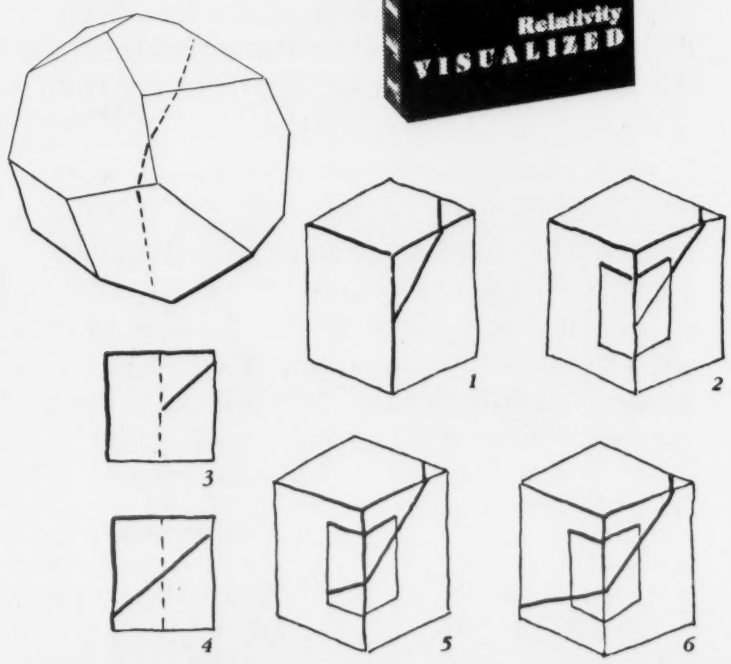
How to draw straight lines on curved surfaces. How do you draw a straight line on a curved surface? If you can do it you can experiment with all kinds of ideas.

Any curved surface can be made up from or approximated by a number of flat surfaces put together. You can certainly draw a straight line on a flat surface. The trick is to draw a straight line around a bend in the surface. What do you do when the line comes to a bend?

You put a patch of paper around the corner. Extend the line on the paper patch. Remove the patch and flatten it. Extend the line over the flattened patch. Replace the patch on the corner. Extend the line over the adjacent flat surface. This is in effect like running a piece of tape around the corner of a box in such a way that it does not tear, buckle, or fold over on itself.



Now you have a nice new idea in your mind. What can you do with it?

INFORMATION AS A COMMUNICABLE DISEASE

by Kevin Kelly

The history of science is a house of upsets. Here comes Galileo banging down the doors of astrology, here comes Darwin dragging out the attic furniture, here comes Einstein ripping up curtains to let the light in. To the faraway eye the whole structure is constantly shifting, unfolding, changing its floor plan just when you thought you knew its shape. Even the mathematical basement could overturn. Things don't stay put for more than two minutes in science. There are revolutions brewing in the hallways!

The system makes sense in the end, but who can stand the excitement?

The Truth is not so radical. What actually happens, happens in between the in-betweens. Information growth is so constant and finely textured that it blurs completely when we look back. A hundred years later, only the dramatic gestures are apparent. We can't see the real push and shove of science unless we bend and face it daily from two inches away.

In the research lab where I work, at least, we never see any revolutions, and we've been looking. Things plod along so slowly that, if there's any excitement, it's akin to the beauty of a Japanese play where almost nothing happens. Gloria F. has run the same experiment, with minor variations, nearly a thousand times in the last five months. You can't expect to get your socks blown off with a tame routine like that.

Scientists are driven to do the same old stuff by simple curiosity — the persistent, childlike variety. They are bugged to death when they don't understand something they think they could. The most common refrain I hear in the lab, probably once an hour, is these exact words: "Why does it do this? Why does it go like that? What will happen if we do this?"

The bookkeeping needed to track the answers is regimented and standardized. There is nothing very revolutionary about adding another entry in the ledger. Science is almost uniformly unoriginal because it is incremental by design and derives its value primarily from previous entries. Nothing would be worse than to invent a new number symbol or revise a tallying method in the middle of a book. Things must happen one line at a time.

Life in the lab would flatten out into complete boredom without the little mysteries and hard-to-explain findings which always come up. These give us a chance to ask "Why?" and spend time wondering. Most mysteries are eventually explained, if not by us, then by someone in Massachusetts or Florida. But there are always anomalies that don't go away and that we have to work around. If enough of these pile up in one area so that it becomes awkward to work there, then a curious thing happens: some whippersnapper butts in with a new way of accounting which everyone reluctantly agrees will take care of the discrepancies. The data is transferred, the whole show is run from a different book, and the new system is the standard until anomalies pile up again.

In addition to traveling all over the globe and founding Nomadics Books in Athens, Georgia, Kevin Kelly has spent a fair amount of his time in college libraries. He wrote this examination of the flow of scientific information following a year working for the University of Georgia, co-producing a medical education and research film about human digestion.
—Jay Kinney

***Current Contents** and **Science Citation Index** are both published by the Institute of Scientific Information, 3501 Market Street, University City Science Center, Philadelphia, PA 19104. **Current Contents** (weekly) is $245/year. **Science Citation Index** (bimonthly) is $5200/year. Both services are also available online from **DIALOG**, 3460 Hillview Avenue, Palo Alto, CA 94304.*

With keen vision you can see these changes coming like comets. I was inspired to work for a university by a guy I've never met who codiscovered the structure of DNA and won a Nobel prize for it. He was trained as a bird watcher but saw a change coming and shrewdly switched his line of work to biochemistry, perhaps because he lacked preconceived ideas of what the new perspective had to look like. I gathered from this that any normally brilliant fellow who allowed himself to be sensitive to creative ideas could, by being in the right lab at the right time, luck into some awesomely simple insight. It was just a matter of hanging loose. If you didn't harden your mind and you kept on your toes — ready, like an ace shortstop — you could grab the Big One as it zoomed down from the heavens, and score the gift, just because you were ready! I woke up after six months in the lab and realized that I had as much chance of uncovering some Nobel truth as I did of inadvertently building a finely crafted cabinet or accidentally learning to play the piano. The grain of discovery doesn't run that way.

That there was a texture, a geography, a structure to what we knew, how we knew what to look for and the rules to follow to let us know when we found it was news to me.

Some of the lumpiness in what we know is caused by the special way scientific information is passed along. If every time I passed an idea to you I was required to mention where I first got a hint of it, we'd have a kind of scientific notation. When you passed on the idea I gave you, modified by a few others you picked up from someone else, you would mention that you got some ideas from me. If we did this in writing, and kept all of it, you wouldn't have to mention who gave me my idea, because anyone could find my letter to you and look it up. If we were very orthodox we would do this for every idea, every time. We would soon have whole libraries full of stuff that few people would want to read.

And that's what our libraries have today, whole shelves of books that are never read. Strangely, the better the library, the more complete their records, the more books they have that nobody reads. In a book that hadn't been checked out of the university library in three years I read a study that revealed that only half of the books in a library are checked out in a given year. Another rarely referred-to journal stated that less than half the back journals are referred to each year. And a little-noted paper demonstrated that half of the two million papers published each year are never noted by anyone. The statistics would imply that a few papers might not even be read at all. Yet papers

The better the library, the more complete their records, the more books they have that nobody reads. In a book that hadn't been checked out of the university library in three years I read a study that revealed that only half of the books in a library are checked out in a given year.

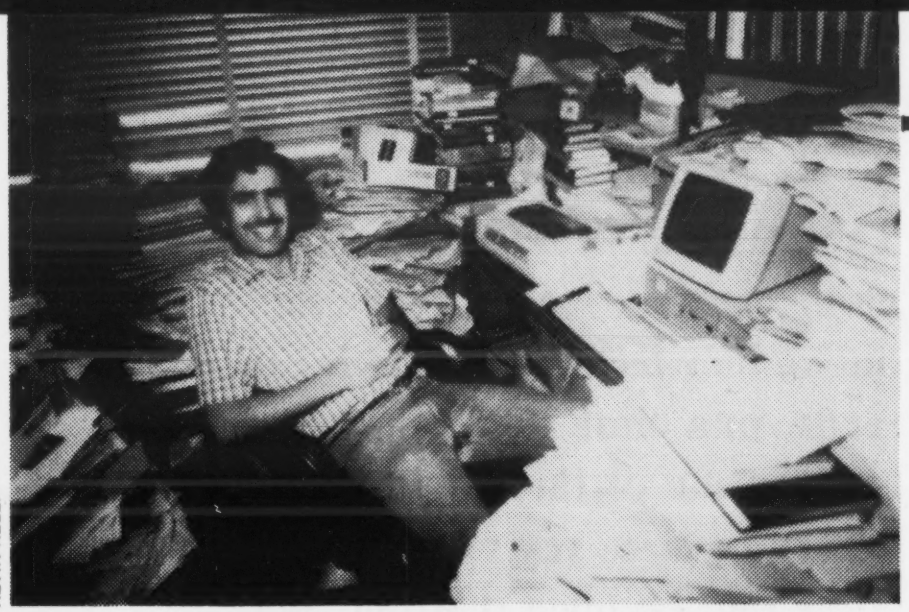
that are never read are kept because their mere existence is valuable. A whole chain of better-read papers is built upon them the way important sums depend on petty figures.

The result is interesting, because papers and books are the presumed currency of information exchange. Most papers are ignored because of the old 20-80 effect, or in this case, more like the 10-90 effect: ten percent of the people do 90 percent of the work. An investigation of documents concerning milkweeds claimed that all the information to be found on the subject was contained in 96 of the four thousand or so papers written on the subject. Until recently the bugaboo was that the researcher wouldn't know which 96 until he finished reading all four thousand.

Scientists won't dump the 39 repetitious papers found in every 40 because redundancy is the sister of accuracy. The price of precision is a cumbersome mess of numbers and papers. So what, the scientist thinks, you just archive it in libraries, which they tend to view as bottomless filing cabinets. Librarians know better. They know they couldn't possibly keep all two million papers published each year.

Books, once ordered, take a long time to arrive, and to be most useful should be in the library shortly after being printed. A couple of librarians will be responsible for securing all the best, newest, most durable information available to science. This means librarians are peeking at the edges, all edges, of science, trying to discern which information is most useful in areas they couldn't possibly be expert in, and to have it ready when we need it.

So many books flow through librarians' hands that they pick up the fabric of what's happening. They know what's hot, what's stagnating ("We're quite rosy in biomass these days"). They learn the rough geography of the



KEVIN KELLY

Information overload threatens to engulf a professor's office at the University of Georgia. Stream ecology post-doctorate student Ted Georgian sits in his prof's office surrounded by a sea of scientific journals, library books, papers in progress, and a computer terminal linked to university databases.

expanding terrain from what comes in, and wherever the map is empty they start filling it.

Librarians used to purposely leave blank spots to save money, then borrow information from another library when necessary. These days the real cost of interlibrary loans is so expensive that it is cheaper to buy the book. Our library will automatically purchase any book I request if it costs $100 or less. Science books published last year averaged $51 apiece (some go for $200). That works out to 11 cents per page, which makes the five-cent copy machines in the library an incredible deal.

The two million scientific papers published each year appear in about 80,000 different sources. My friends in the labs each read about 200 of these articles per year. The main method they use to connect with the 200 papers that will do them any good, while weeding out the thousands of redundant ones and the other million or so that have nothing to do with them, and at the same time not missing important ones that slide in at different angles, is to read a tiny, unusual magazine called *Current Contents.*

This ingenious magazine is compact, about the size of a *TV Guide*. The whole thing is nothing more than the reproduced tables of contents from the several thousand best scientific journals. Table of contents pages in the journals normally list titles and authors of formal, rigorously styled reports. In a single issue of *Current Contents*, about 3,000 papers will be listed. There are seven flavors: life, clinical, social, physical, environmental, engineering, and the arts. The professor I work with eagerly awaits the arrival of *Current Contents* and steals them home to read in bed at night, going through about 1,000 titles each week.

According to a paper recently listed in *Current Contents*, "For every person who reads the whole of a text of a scientific paper, twenty read through the summary, and 500 read the title and stop there. Most papers have their title read and no more." Therefore, a lot must be conveyed by the title. Tremendous energy is spent squeezing the whole message of the study into a brief and appealing headline. In fact, the sensation of reading *Current Contents* (once you have the lingo down) would be similar to reading a weekly Sunday magazine that was composed solely of headlines of the major stories from newspapers around the country. (Not a bad idea for a magazine actually.) Some headlines would be more informative than others, but on the whole you'd get a funky sense of what was going on. You could read the full story by looking up the proper day's paper.

As scientific titles become less of an indication of the paper's content and more of an advertisement, the temptation is toward yellow journalism. In the same vein that supermarket newspapers claim "Study Shows There's Life After Death" or "Lose Weight Eating," so scientists are tempted to work into a title catchy hooks like *cancer* or *cloning* or other best-selling buzz words that are only indirectly connected to the main point of the article. The art of title writing is so important that the title is often the most revised portion of a paper. On occasion, workshops devoted to honing this skill are offered at universities. Some authors completely submit to a pragmatic view and figure that since most folks are going to get no farther than reading the title, the title should give, as much as possible, the results or conclusion of the study. Instead of "A Preliminary Theoretical Model of User Patterns in Scientific Information," just sock it to them: "Texture of Science Is Like Lumpy Gravy."

The author's address is indexed in the back of each *Current Contents*. A researcher baited by the title of a paper mails a post card to the author, requesting a reprint, which the author sends at no charge as long as the supply lasts, which is often not long if the title promises a hot one. The author would like to have an unlimited supply of reprints but he must pay for them himself, as well as often pay to have his article published in the first place. (This is another story.)

Requested reprints trickle back to the research labs, are scanned, and occasionally actually read, and then are filed away in microlibraries according to each scientist's idiosyncratic system. My friend's basic research library is two large filing cabinets that hold all the world knows about pancreatic lipase enzymes. They are within arms' reach sitting down. Half are free reprints, the other half are Xeroxed from back copies of journals in the library.

These latter are acquired by going on a once-a-week or once-a-month library run. Clutching an ongoing grocery list of titles, our hero dashes off to the main library, scurries through the stacks collecting journals, hurries to the copy machines, reproduces them, grabs the copies and runs back to the lab. It is as if scientists didn't like being in libraries. They never read anything there, at least I've never caught one, and it's a rare sight to see one browsing, even for pleasure. Libraries are for students who don't know any better. Yet researchers love to be near libraries. The principal reason why the majority are working at institutions instead of being wired up to an electronic cottage among the cows is because they can run through the big libraries any time they need to.

Some third-world researchers depend on *Current Contents* and the free reprint system for up to 90 percent of their information base. In some disciplines they are the main users of the system. There's a box in the lab overflowing with stamps from around the world. The most exquisite ones were pasted on post cards with polite requests for the latest on "The Hydrolysis of Tracyglycerol Emulsions by Lingual Lipase," a reprint from our lab, to be sent to India or some other distant place.

The future is computers, but they haven't arrived in the science labs, yet.

Certainly the bulk of laboratory apparatus is programmed with computer chips — the scientist couldn't do a thing without them now — but people in the labs are almost unanimously skeptical of the computer's role for their information. They claim that less than 1 percent of their useful stuff is learned by computer networks. The infrequent computer searching they do is chiefly to double-check what they already suspected.

Telephoning is big, however. John P. will be struggling through a poorly written paper, throw up his hands in frustration, and call up the author. How in the world did you come to that conclusion? he demands. Nearly every scientist I've spoken with has praised the casual table-talks following a conference as their most important source of new ideas. That is when the meaty news comes, unburdened by sticky references or cautious statements. Award-winning biology-watcher Lewis Thomas observed, "I have the impression that a great body of information is getting around by a mechanism that can only be termed gossip."

Maybe we're in the middle of a gossip explosion. The facts show that the paper-per-author output has remained steady, implying there is not a literature explosion so much as a

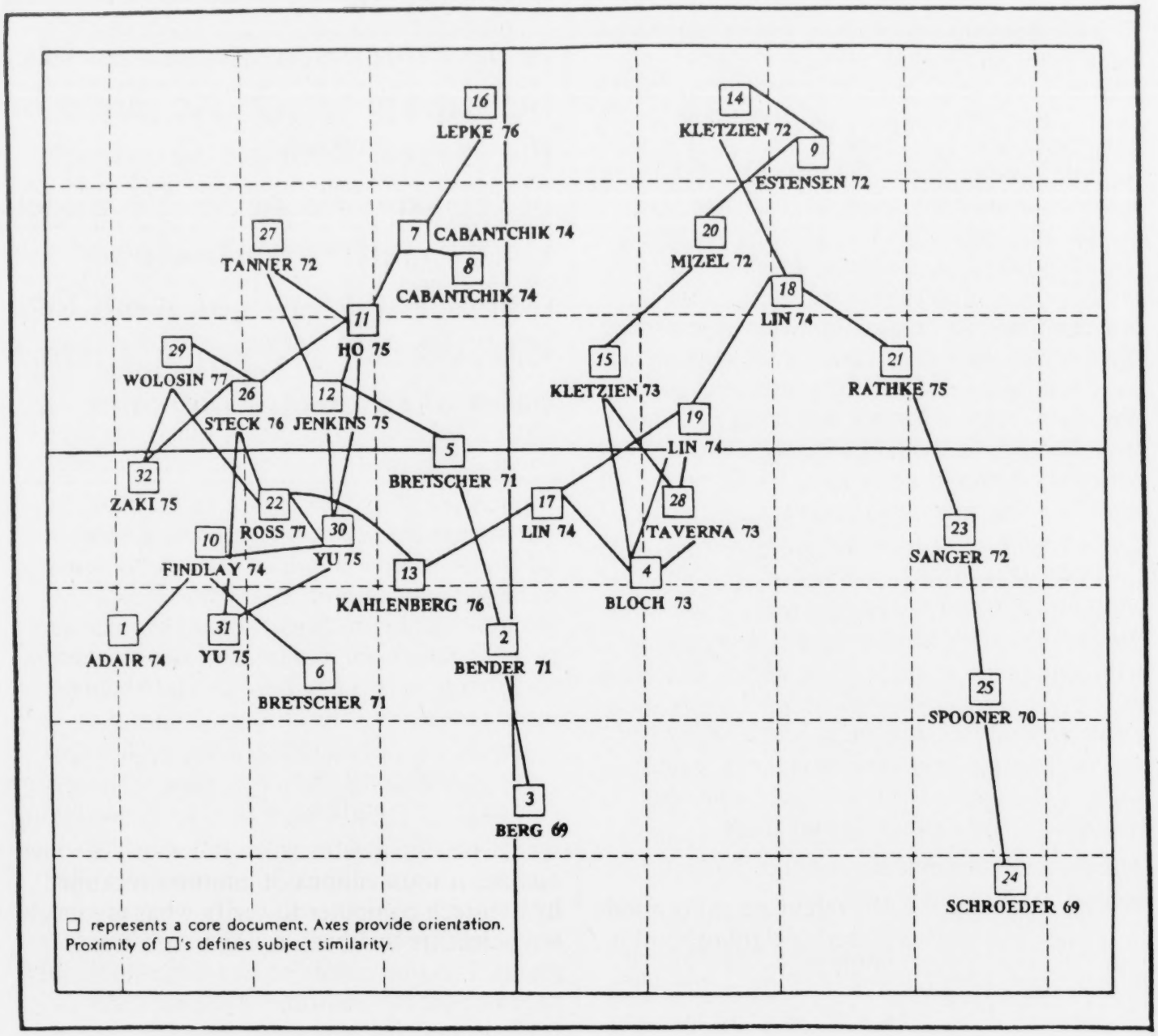
The behavior of ideas as they jump from person to person has the same pattern as the spread of the Plague. Both are described by the same mathematical model. Under analysis, the booming exponential growth of scientific ideas actually breaks down into a series of recurring epidemics.

population (of scientists) explosion. More scientists, more hubbub. At any rate, there are more papers and more new ideas flying around than before, and it has taken one or two of these new ideas to tame the rest and make them accessible. Let me try to explain one of them.

A scientist studies to prepare his brain for a good idea. He diligently furrows into the field he wishes to have an idea in, getting everything ready for a good idea when it comes. The idea appears all of a sudden, traditionally while he's outside the lab, walking or brushing his teeth, and immediately it grows, feeding on the mental bits and pieces he had been stockpiling for the purpose. As soon as the idea has fruited in his brain it begins to try and replicate itself into other brains.

The behavior of ideas as they jump from person to person has the same pattern as the spread of the Plague. Both are described by the same mathematical model. Under analysis, the booming exponential growth of scientific ideas actually breaks down into a series of recurring epidemics. Information, it seems, is a communicable disease; scientists, mere willing hosts. This is a handy model, because more is currently known about the broadcast of disease than about the workings of information nets.

There's a standard curve for the expansion of an epidemic — slow initial growth, rapid spread, and then tapering off as the population becomes saturated. In the past, scientists relied on intuition for signs of a groundswell in a new field, a hunch of something happening. These days it's important to find the most active areas soon, so the big daddy-os in government and private foundations (who generally aren't scientists) monitor the patterns of scientific papers carefully with computer-assisted pro-



A map showing the progression of ideas from one scientist to another. The most concentrated clumps of citations are likely to be the most rewarding spots to begin research on a subject. This chart tracks biomedicine documents dealing with red blood cell membranes in vertebrates. (From the *Institute of Scientific Information Atlas of Science — Biochemistry and Molecular Biology* 78/80, 1981.)

grams and graph the resulting curve on the wall. When the curve begins to match the instep slope preceding a full-fledged epidemic, just at the point they figure a little shot of dollars will have maximum effect, they start diverting money in that direction and hope it takes off.

The computer-assisted program they use was developed by Eugene Garfield, an ex-librarian, who also started *Current Contents* in his Philadelphia garage. The tool, called citation indexing, is the first mirror look at the texture of scientific information, a scientific method that examines scientific method.

Among the books in my university's library are several with photographs of Chinese scroll painting. Near the edges of the dark, moody paintings are the "chops" of previous owners of the scroll. These marks have become integral parts of the pictures, and, in fact, bring value to them. In the same way, the marks that an idea carries around, letting you know who else was infected with it, are called citations. They give extra value to the ideas. If a copy of the original was acceptable we could make several, add our own mark, and pass them along. We'd have a branching network of replicating ideas radiating out from the original, each one stamped with citations.

This is where the computer comes in. The computer keeps track of all the pieces being copied and passed around. That's the hard part, especially with several million citations per year. Each time a person mentions he's been infected with an idea, whether it's a recent one or an old one, it goes into the com-

puter with two ends — one under the infectee, one under the infector.

The connections can now be traced both ways, back from an idea, or forward from an idea. Pick a paper at random from the middle of the network. The paper itself is marked with a bibliography that tells where the ideas were one step before this. As mentioned earlier, you can trace it all the way back to the beginning. Going the other way, the citation index traces where each branch of the idea travels afterward.

For instance, it would make a list of any book or paper in the future that acknowledges this text of mine as a source of ideas. A year from now you could follow all the divergent paths these ideas have led to, probably weird offbeat corners you would never have found otherwise. It's like being able to ask someone, "Who's playing with your ideas now?" If you can find the name of any idea, you can find where it came from, using references, and you can find where it's going, using citations.

With all these relationships burned into its brain, the *Science Citation Index*, as it is properly called, can notice patterns that connect. The index comes either as a large 14-volume series, or in electronic text. Recently it has been taught to paint visual maps of the links within fields of research.

These are the maps of different neighborhoods in science. An experimenter's neighborhood is bounded by the klan of all those who wave to him and everybody he waves to, that is, the set of people who have acknowledged his ideas in their work as well as those he has cited in his work. Usually most of the people down the hall, or sometimes even working in the same lab, belong to a different neighborhood. The group tinkering in the laboratory next to ours are working in another galaxy, while a group in Sweden are our neighbors. The ones living closest together in a neighborhood are the ones bouncing the most ideas off each other. On the map this distance is measured out in units of citations. Nearness means a commonness of ideas.

You enter any neighborhood by dropping names, by citing an author. An individual scientist may be on the fringe of hundreds of communities, and near the heart of a few. In the center of every neighborhood is a nucleus of influential people who set the tone and pace, and occasionally bully the timid. In scientific communities these are the core people others concede as being personal donors of important ideas. A person new to the block doesn't need to unravel the tangled knot of relationships. Just a look at the map hints where the godfathers are. He could begin his research exploring the flock at the center and gather the fattest ideas there. Sweeping outward from the nucleus he would have to cast his net wider and wider, over more and more papers, to haul in the same catch of useful news. The hinterlands of one place, of course, could be the backyard of a different neighborhood.

The maps show only the major landmarks — folks everybody in town knows, and who know everybody else. The "empty" background is, in reality, a solid mass of other, smaller neighborhoods, hangout spots, quiet workers, a few hermits, and people moving around all the time. This is the map of our immediate neighborhood. We're not shown because we're mere peasant laborers in the field, but if we were, you'd see us living somewhere near the edge.

In fact, the map is changing all the time. It was surveyed three years ago. The ground is not static, but an undulating throb. It's the same growing skin of ideas that foundation directors hold their breaths and run their hands over, searching for a sign of life on the charts. The tissue stirs, the pattern swirls. Maybe when the art is more developed we can make animated movies of ideas as they weave into colonies and every once in a while burst and contaminate everything with their strangeness.

So far we've got a fuzzy snapshot of the rough texture. It took zillions of citations reckoned by a hi-tech computer to verify what my neighbor scientists had been trying to tell me all along. The words they used, when they finally found them, seemed ridiculous, but were as close as any. The texture of scientific information, that is, the terrain of what we know, they kept saying, is a little thick in places, a little thin in others . . . like lumpy gravy. ■

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INFORMATION QUARANTINE IN ENGLAND

As we go to press (May, 1984), a trial is in progress in England that demonstrates governmental fear that, indeed, information is a communicable disease.

Knockabout Comics, distributors of Heathcote Williams's ***Elephants*** *tabloid (**CQ** Spring 1984) and past distributors of* ***CoEvolution*** *in Great Britain, was originally busted in July, 1982 for distributing 62 different books and comics that the British authorities deemed dangerous. These included many well-known alternative comics, such as the* ***Freak Brothers***, ***Young Lust***, *and* ***Dope Comics*** *(**NWEC** p. 514), as well as many books on mind-altering drugs — both books of cultural commentary and familiar "how to" books on marijuana and mushroom cultivation (**NWEC** pp. 103, 579-580).*

The case has only now gone to trial, with 10 "how to" drug books charged; the remaining titles await subsequent trials in other courts. At issue is the state's claim that the 1959 Obscene Publications Act should be extended beyond the sexual area to outlaw other publications that "have a tendency to deprave and corrupt."

Since the first bust in 1982, another distributor, Airlift Books, and eight bookstores have also been raided with approximately 30,000 copies of 250 titles seized altogether. The wide net cast for books considered depraved now includes Aldous Huxley's ***The Doors of Perception*** *and Hunter Thompson's* ***Fear and Loathing in Las Vegas****. Trials on these books await the precedent-setting outcome of the Knockabout case.*

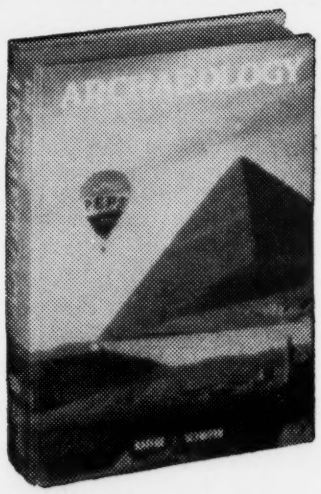
Should the state win the case, Knockabout will be liable for large fines, possible prison sentences, and court costs. Should the jury rule in Knockabout's favor, the state promises to appeal the decision to higher courts. Either way, legal expenses for Knockabout are steep and threaten to put the UK's favorite alternative book distributor out of business.

Contributions to Knockabout's legal defense fund, "Right to Read," can be sent in the form of international money orders to:

Right to Read,
249 Kensal Road,
London W10 5DB, England *—Jay Kinney*

Archaeology

A rare specimen: a textbook that is a joy to read for its own sake. ***Archaeology*** *ably puts across the science and practice of discovering the past, with a twist I've not seen before: co-author Rathje's study of contemporary garbage in Tucson, Arizona is used to demonstrate how archaeologists treat data and test hypotheses. I found myself painlessly learning something new on nearly every page.*
—Jay Kinney
[Suggested by Jim Heidke]



Archaeology
William L. Rathje
and Michael B. Schiffer
1982; 434 pp.
$19.95
postpaid from:
Harcourt Brace
Jovanovich
757 Third Avenue
New York, NY 10017
or Whole Earth Access

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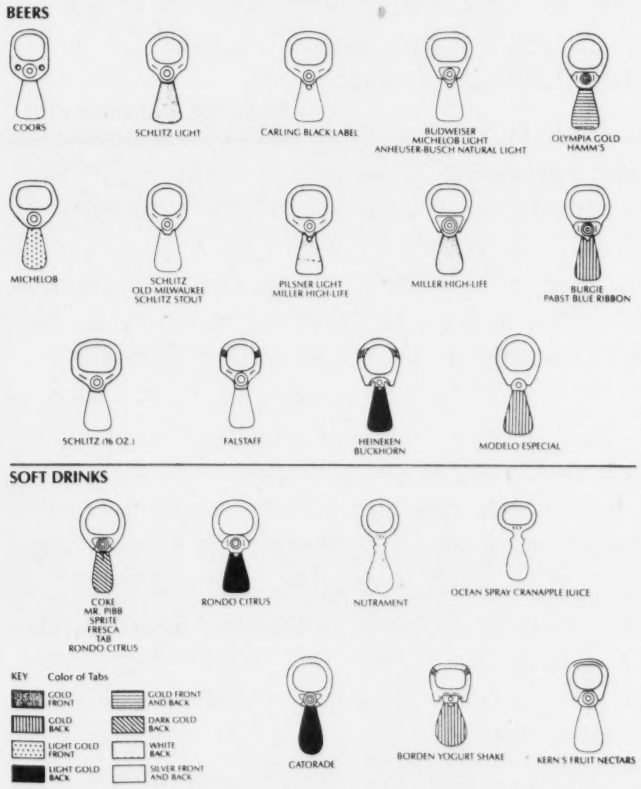
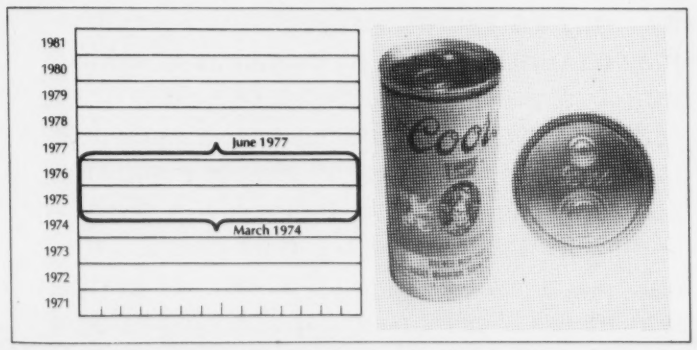
After the pop-tops are sorted according to form, the archaeologist will consult patent records, catalogs, and company documents, to determine if different forms of pop-tops were used on cans of different brands and kinds of beverages. The end result of this process would be a typology of pop-tops identifying the formal characteristics of each type and the brand and kind of beverage it represents. Some types are very distinctive, such as that of Coors beer; some show only subtle differences. On the basis of this typology, pop-tops can be sorted into two groups — those from beer cans and those from soft-drink cans. However, cans for the same brand and beverage may also have different pop-tops if they are manufactured in different parts of the country, so that this typology is applicable only to Tucson, Arizona, and to those nearby cities supplied by the same breweries and soft-drink manufacturers.

Once the pop-tops in each bag are identified and counted, totals for beer and soft-drink cans can be compiled for the sample and extrapolated to the whole drive-in. The results from our drive-in collections indicate that canned beer is ten times more popular than canned soft drinks.





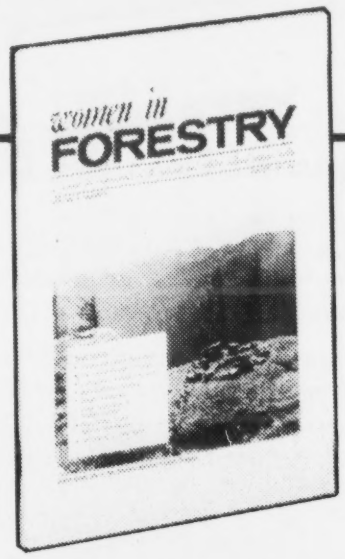
Because of its short life, the Coors punch-top can — manufactured between 1974 and 1977 — is a very effective horizon marker. Levels in modern landfills that contain this type could be precisely dated.

Women in Forestry

Sometimes women in the woods feel somewhat isolated, and sometimes New Age backwoods forestwomen get nervous about making a professional career out of their avocation. They'll find support and help here. Best of all, they'll find attitudes apparently only women can generate. ***Women in Forestry*** *includes profiles of veterans in the field, advice for administrators, book reviews, fiction, and letters — one of its stronger sections, and an excellent exchange forum.*

Sure is different from your conventional forestry journal. Printing isn't so hot but it is pleasantly illustrated with pen and ink and photos. Contributors are jazzed about making the magazine survive.

—Dorothy McEachern and Terry Lawhead



Women in Forestry
Dixie Ehrenreich, Editor
$15/year (4 issues)
from:
Women in Forestry
c/o Dixie Ehrenreich
Laboratory of Anthropology
University of Idaho
Moscow, ID 83843

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At the Women's Intermountain Network for Natural Resources (1983) conference last year, participants were asked to examine gender-related obstacles to professionalism. Men with established careers in the natural resources were asked to provide advice to women. The recurring theme found in their advice was one of conflicting duality: a woman must realize it's a "man's world" out there and behave like one to survive while making sure she doesn't sacrifice her femininity by acting like a man! Can women natural resource managers behave like men to survive and still not sacrifice their special gender-related view of the world as nurturers, connectors, integrators, and futurists? Or will women natural resource managers submerge and ignore any inner "female" feelings and adopt the male ethic in order to survive in a male world? There is some evidence that this may happen. In a study of students in U.S. engineering colleges in 1975, it was found that when entering the program, women were significantly more concerned than men that their job be "helpful to others and useful to society in general" (Ott 1976). However, the data indicate that over the course of the first year in the program, women became far less interested in helping others and more interested in anticipating above-average incomes (Gardner 1976). It would appear that women in engineering began to adopt the attitudes of the majority of their male peers. Do similar differences exist between women and men entering natural resource professions, and if so, what changes occur as they practice the profession?

Forestry students from Maine, Massachusetts, Vermont, and New York attended a recent symposium in Burlington, Vermont, entitled "Research in Forest Productivity, Use and Pest Control: Contributions by Women Scientists."

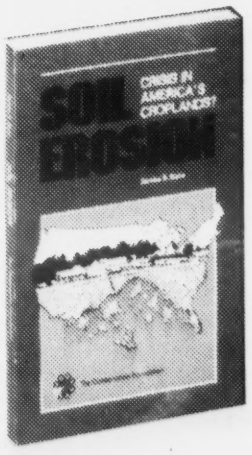
Soil Erosion

No moralizing. No righteous insinuations that farmers or corporations are out to starve future generations by mining the nation's soils. Instead, the political nitty-gritty: how terribly difficult it is to harmonize cash-flow problems (farm debt, land prices, fluctuating markets, federal subsidies, equipment purchases) and soil conservation practices. Learn how "targeting" erosion-control funds to the worst situations can slip into pork-barrel funding; how cross-compliance policies (e.g., the feds insure crops against weather disasters in exchange for farmers following good erosion-control guidelines) lose control in times of high crop demand; how punishing farmers for sloppy land use practices has never worked; how incentives for farmers who rent must be different from those for farmers who own.

In short, the first five chapters of this book are ho-hum. The ***WEC*** *has reviewed many better books on soil erosion. But the last chapters competently fulfill a vacant niche, the niche of America's most important politics — saving its topsoil.*

—Peter Warshall

Soil Erosion
(Crisis in America's Croplands?)
Sandra S. Batie
1983; 136 pp.
$10.50
postpaid from:
The Conservation Foundation
1717 Massachusetts Avenue, N.W.
Washington, DC 20036
or Whole Earth Access



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Several studies have examined the relative effectiveness of these tillage alternatives. In one study, no-till with residue cover reduced erosion 63 percent over conventional tillage involving moldboard plowing, secondary preparation, and no residues. . . .

However, conservation tillage techniques usually require the use of increasing amounts of herbicides and pesticides to control weeds and insects. No-till methods sometimes increase herbicide use by a factor of 2.5. As a Tennessee district conservationist stated, "A farmer has to be a good 'chemical' man to be successful with no-till." The farmer using conservation tillage practices faces some new problems. He must consider the increased costs of chemicals. In addition, residual herbicide buildup may damage future crops. For example, the herbicides used with corn can kill soybeans. Corn-soybean rotation may thus be constrained if excessive amounts of herbicides remain in the soil between plantings. Furthermore, increased herbicide use is not always successful in controlling weeds. And increased chemical use may result in increased chemical contamination of water.

Soybeans planted (no-till) in wheat straw.

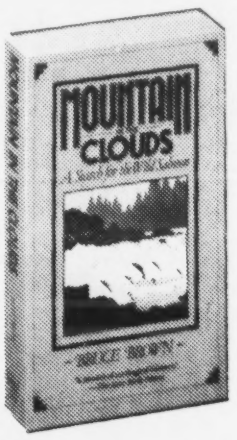
Mountain in the Clouds

A good "three in one" book: a fishing story, a biological study of the salmon's life cycle, and an environmental history of how the state of Washington has decimated its salmon runs.

Brown does a thorough analysis of how dam construction, overfishing, habitat destruction, current logging practices, and general government mismanagement have contributed to the declining fish population. The bad guys are Weyerhaeuser, Washington Public Power Supply System, and greed in general. The victims are the fish and everyone who appreciates them.

All serious fisherpeople should read this book. What is happening to the salmon in the Northwest is relevant information for improving fisheries management programs everywhere. —*Stephen Adey*

Mountain in the Clouds
(A Search for the Wild Salmon)
Bruce Brown
1982; 249 pp.
$8.95
postpaid from:
Simon and Schuster
Attn.: Mail Order
1230 Avenue of the Americas
New York, NY 10020
or Whole Earth Access



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. . . As the Northwest's tremendous old-growth forests have dwindled toward the vanishing point . . . the timber companies needed to secure control of another source of prime timber. Investment in the Far East and the Southern United States began during the 1950s . . .

The shifting of the timber industry away from the Northwest that is now underway marks the third time in less than a century that American lumbermen have exhausted an area and moved on. First came the pine forests of upper New England, and then the Great North Woods of the upper Midwest. . . .

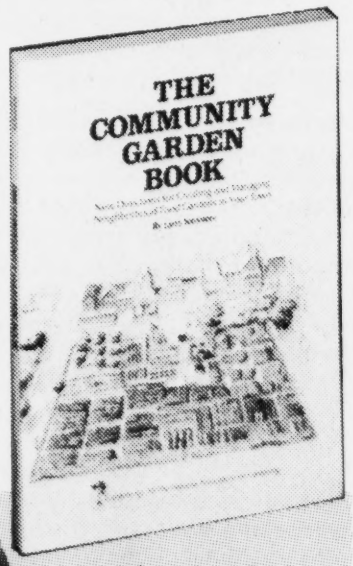
Neither Weyerhaeuser nor any other of the timber giants were abandoning the Northwest entirely, of course. They had invested millions in pollution control and mechanization, and they intended to be around to take advantage of the next harvest cycle, which current state and federal policies seemed to insure would give them a monopoly on the supply of timber.

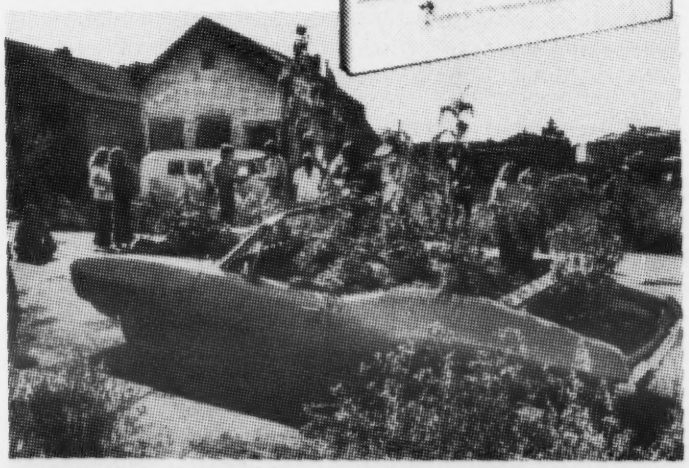
There was, however, a certain similarity between the "cut and run" policies of Frederick Weyerhaeuser and George Weyerhaeuser's modern gambit. Once again the company had overlogged an area in a manner destructive to the environment. And once again, the profits from the venture were great enough to allow it to continue the process in another part of the world.

The Community Garden Book

This is like a yearbook on the current status of community gardening in the U.S. Many of the major programs are featured along with an overview of what's been learned about preventing vandalism, setting up irrigation and composting systems, fundraising, and more. The listing and reviews of resource information is worthy of the ***Whole Earth Catalog****. A neighborhood group could start a garden with this.* —*Rosemary Menninger*

The Community Garden Book
(New Directions for Creating and Managing Neighborhood Food Gardens in Your Town)
Larry Sommers
1983; 121 pp.
$8.95
postpaid from:
Gardens for All
180 Flynn Avenue
Burlington, VT 05401
or Whole Earth Access





Some California gardening fanatics proved the point that almost anything can be used for gardening!

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Save Cash — Use Trash!

Imagination is the key word when it comes to saving money by using cast-off materials. A group that is high on enthusiasm, but low on budget, can make ends meet through creative scrounging. Trash can be substituted for cash!

The items below are being used today in gardens across the country.

Item	***Possible Uses***
Wire cable spools	Work table or picnic table
Broken concrete, used brick, stones	Retaining walls, pathways, patios, barbecue pit
Telephone poles	Curbing, barriers
Railroad ties	Steps, raised beds, edging
Used tires	Planting containers, fencing, swings
Driftwood	Garden fences
Used 3- or 5-gallon plastic pails	Planting containers, water buckets, storage
Plastic gallon jugs	Scoops, watering cans, hot caps
Used 30- or 55-gallon drums	Water storage, "manure teapots"
Wooden loading pallets	Compost bins, fencing
Bushel baskets	Planting containers
Whiskey barrels	Planting containers
Bathtubs	Planting container, water storage
Bureau drawers, soda bottle boxes, milk and egg cartons	Seedling flats
Metal bed frames and springs	Trellises, gates
Old piping	Fenceposts
Scrap lumber	Signs, cold frames, raised beds, containers
Old wooden boat	Planter, play equipment

HortIdeas

A new monthly newsletter of gardening information gleaned from reading mostly technical bulletins at an agriculture library (in this case, the University of Kentucky's), capsulized for easy digestion and referenced for further investigation. The overwhelming feeling derived from the mass of information contained in a decent ag library makes this a most useful service. The Williamses are also interested in sharing the results of amateur research done by their readers. —*Richard Nilsen*

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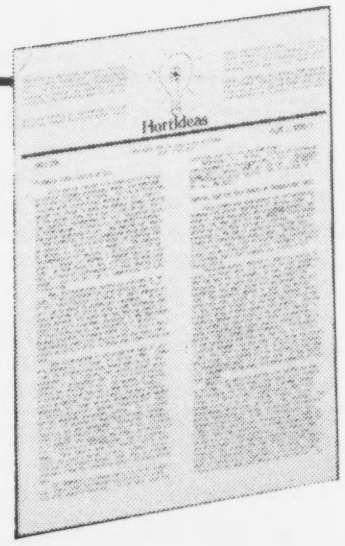
Soils can be treated with chemicals or heated to control disease organisms, weeds, and nematodes which are injurious to plants. But the difficulties involved with conventional methods of soil sterilization are enough to send the amateur grower running to the garden store for a bag of sterile soil mix! . . .

Now, microwave-oven technology promises to reduce, if not eliminate the uncertainties and "fuss" of soil sterilization, at least for small amounts of soil (up to about 10 pounds per treatment). An extensive series of trials using a home microwave oven (Sears Kenmore, 625 watts maximum heating power) to sterilize soils have been conducted in the Department of Plant Pathology at the University of Kentucky. . . .

HortIdeas
Greg and Pat Williams, Editors
$10/year (12 issues)
from:
HortIdeas
Route 1
Gravel Switch, KY 40328



Open polyethylene or polypropylene bags of soil were exposed to full power for various times. (Sometimes the polyethylene bags broke open during long exposures!) For 2 pounds (wet weight; actual water content, if below about 35%, did not significantly affect the results) of soil, 150 seconds of heating eliminated *Pythium* species ("damping-off" fungi), *Fusarium* species (root rot fungi), and most harmful nematodes, but longer periods of heating were needed to control *Rhizoctonia* species ("damping-off" fungi) and the nematode *Heterodera glycines*. For 10 pounds of soil, 425 seconds of heating eliminated *Pythium*, *Fusarium*, and most nematodes.

The Complete Shade Gardener

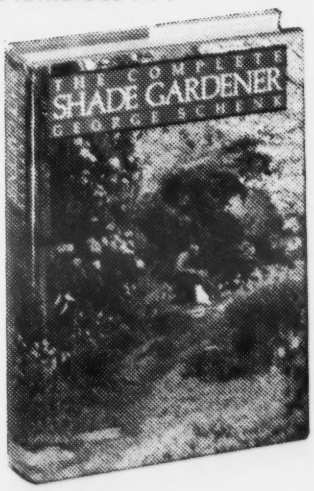
Shade seems a function of modern urban life. Scarce land is expensive, and architects who get to cram square interior feet onto tiny lots often have little time or inclination to consider what that does to the space outside. This author has the additional consideration of climate, since he gardens in Seattle, Washington. He says it got so bad in drippy August that toadstools sprouted on the carpet in his car. He takes all of these sufficient reasons not to garden and turns them into a wonderfully opinionated, and even humorous, display of all that shady sites can offer. —*Richard Nilsen*

•

Gardeners who have tried vegetables and other crop plants in shade know that, in moderate amounts, it is by no means an abomination. I've grown a number of edibles in half-shaded or dapple-shaded beds with rather good results overall. Certainly the harvest has been worth the effort. . . .

For partly shaded ground I especially recommend beets, sweet cicely, cucumbers, turnips, leaf lettuce, Chinese peapods, comfrey, kale, radishes, scallions, shallots, chives, leeks, broccoli, cress, watercress, carrots, sweet potatoes, spinach, zucchini, cabbage, mustard, and French sorrel. As a rule, leafy vegetables accept more shade than do seed vegetables such as corn, pole beans, and peas, which will tolerate only about three hours of shade daily without noticeable impairment. . . . Other vegetables not often successful in shade include okra, eggplant, squash, peppers, and tomatoes . . .

The Complete Shade Gardener
George Schenk
1984; 278 pp.
$25.95
postpaid from:
Houghton-Mifflin Company
Attn.: Mail Order
Two Park Street
Boston, MA 02107
or Whole Earth Access



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Aesculus Hippocastanum (Common Horse Chestnut). Heavy shade, invasive roots. The fallen leaves cake together in a slippery mass. And yet, I know of a perfectly successful shade garden composed of a small maple, rhododendrons, and woodland perennials in new soil beneath an old Horse Chestnut. The lesson here is an extendable one: almost any "bad" tree can be pressed into service as a shade garden canopy *if* you plant in fresh soil and provide sufficient moisture.

Half-shaded vegetable garden in a woodland clearing.

Right Plant, Right Place

This is a very diligent book of lists, 27 in all, with categories that are either types of garden plants (''Plants with aromatic leaves''), or locations in the garden where they are to grow (''Plants suitable for crevices in paving''). Plants in each list are divided into sections running from sun tolerant to shade tolerant, and within each section they are presented in order of decreasing height. There is also extensive cross-indexing between the lists, and each of the more than 1500 plants has its own 2½-inch-square color photograph.

The lady who did all this lives in Scotland and says in her introduction that she got into this when she acquired a garden needing an overhaul and couldn't find a book like this to help her. I don't think I'd like to do her grocery shopping. The American editor is Fred McGourty, who has spent 15 years editing the ''Handbook'' series for the Brooklyn Botanic Garden. —*Richard Nilsen*

•

Trees, shrubs and climbers tolerant of atmospheric pollution

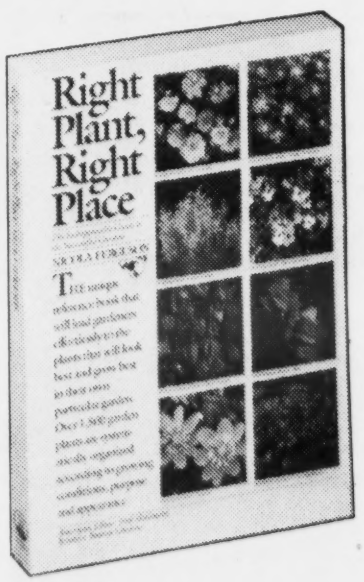
PYRACANTHA coccinea 'Lalandei' [form of Firethorn]

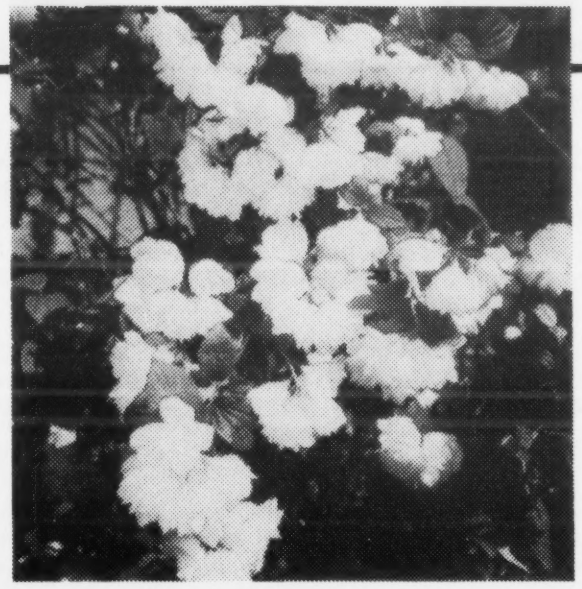
type of plant: hardy shrub
flowering season: early summer
flower colour: white
height: 3.6-4.5 m/12-15 ft
evergreen

The flower heads of pyracanthas are only moderately attractive but the splendid bunches of berries which follow them are very decorative and they appear in large numbers even in sites facing north or east. *P.c.* 'Lalandei' is a vigorous variety. It should be given plenty of room to grow since cutting it back severely will diminish the amount of berries produced. It can be used for thorny hedging and it is altogether a very tough and adaptable plant. Most soils, including chalky (limy) ones of a reasonable depth, suit firethorns.

Hedging — Fruit.

Right Plant, Right Place
Nicola Ferguson and Fred McGourty, Editors
1984; 291 pp.
$15.95
postpaid from:
Summit Books
Attn.: Mail Order
1230 Avenue of the Americas
New York, NY 10020
or Whole Earth Access





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Trees, shrubs and climbers tolerant of atmospheric pollution

PHILADELPHUS e.g. 'Virginal' (form of Mock Orange)

type of plant: hardy shrub
flowering season: summer
flower colour: white
height: 2.4-3 m/8-10 ft

The tall, strong-growing variety of mock orange illustrated here has exceptionally large clusters of very fragrant, pure white, double flowers. It has an upright habit of growth. There are smaller forms of *Philadelphus*, such as 'Manteau d'Hermine,' and several cultivars have single rather than double flowers. All these plants do well in a wide variety of soil types but they thrive where good drainage is available. They are excellent shrubs for town and city gardens.

Chalk — Cutting — Fragrant flowers.

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Katallagete

Ever tried getting your car fixed in a garage up an Appalachian holler? You'll not know the day or hour when the job'll be done, and the price may depend more on the mechanic's mood than upon his ability to cipher. But when the car's ready, you'll like to have been done right, and you'll be able to say that you know the mechanic.

***Katallagete**'s from Appalachia, and its unslick idiosyncracies are of a piece with its editorial personality. Mail them some money — just about any amount — and you'll probably be sent the magazine, like as not four times a year. Heavyweight intellectual iconoclasts like Jacques Ellul, Wendell Berry, Walker Percy, and Christopher Lasch contribute (donate would be more accurate — none of the writers or editors are paid) to this skinny journal. It's laid out with photos in a stark black and white beauty that reflects the world-view from the hills of eastern Kentucky, where **Katallagete** (the word means "be reconciled" in biblical Greek) is edited.*

*A lively survivor of the southern Christian civil rights movement of the early 1960s, **Katallagete** has maintained a dialogue among religious exiles, and exiles from religion, who search for meanings in this American Babylon. Nineteen eighty-three's offerings included Berry on threats to the viewpoint of "home" and "community;" an entrancing account of the life of the Regular Baptists as sensitively portrayed by John Wallhausser; a poem in memory of a Catholic Worker friend by Daniel Berrigan; and a rambling play with science fiction and Kierkegaard by William Schafer of Berea College, the journal's home. **Katallagete** is a friend worth making.* —*Jim Burklo*

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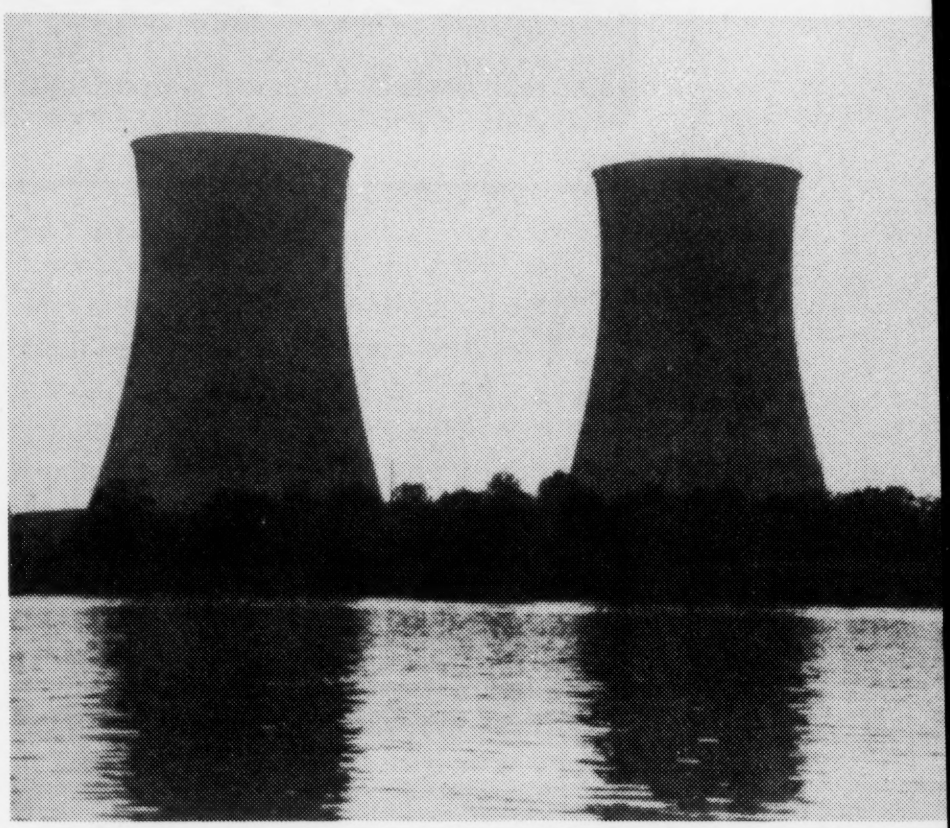
College Station
Berea, KY 40404



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A powerful class of itinerant professional vandals is now pillaging the country and laying it waste. Their vandalism is not called by that name because of its enormous profitability (to some) and the grandeur of its scale. If one wrecks a private home, *that* is vandalism. But if, to build a nuclear power plant, one destroys good farmland, disrupts a local community, and jeopardizes the lives, homes, and properties within an area of several thousand square miles, *that* is industrial progress.

For membership in this prestigious class of rampaging professionals, there are two requirements.

The first requirement is that they must be careerists — transients, at least in spirit. That is, they must have no local allegiances; they must not have a local point-of-view. In order to be able to desecrate, endanger, or destroy a *place*, after all, one must be able to leave it and to forget it. One must never think of any place as one's *home*. One must never think of any place as anyone else's home. One must believe that no place is as valuable as what it might be changed into, or as what might be got out of it. Unlike a life at home, which makes ever more particular and precious the places and creatures of this world, the careerist's life generalizes the world, reduces its abounding and comely diversity to "raw material." . . .

The second requirement for entrance into the class of professional vandals is "higher education." One's eligibility must be certified by a college, for whatever the real condition or quality of the minds in it, this class is both intellectual and elitist. It proposes to do its vandalism by *thinking;* insofar as its purposes will require dirty hands, *other* hands will be employed.

—*from* "Higher Education and Home Defense"
by Wendell Berry

Katimavik

While Americans of the U.S. variety only hope and dream of an alternative national youth service, Canada is in its eighth year of actually doing it! That program is Katimavik, for young people aged 17-21 years.

Katimavik, the creation of the (almost certainly doomed) Federal Liberal Party, is in what may be a last stage of expansion before the anticipated conservative landslide. (During a brief former stay in office, the conservatives tried to kill Katimavik.)

That being as it may, Katimavik offers a taste of a community-building, internationally cooperative future that may yet still be.

Living together in three parts of the country over nine months, groups of 12 young people learn to live together, to use both official languages (English and Français), and to participate in and serve their community through cooperative physical and human service work projects.
—*Larry Hunt*

Katimavik
information **free** from:
Katimavik
Participants Office
2270 Avenue
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Cité du Havre
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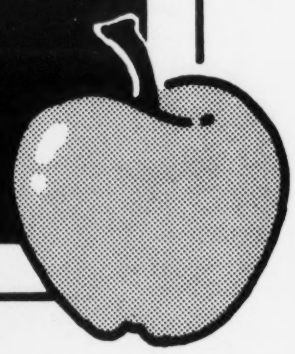
Canada H3C 3R4

Home Study Goes Legal



by Geeta Dardick

The home study movement has a new lover — the public school system. Instead of prosecuting parents for educating their children at home, a number of public elementary schools across the country are proudly sponsoring home study programs. Last year at San Juan Ridge Union Elementary School in Northern California a whopping 15 percent of the students were enrolled in Independent Study. This change in educational philosophy is a boon for parents who want to experiment with teaching their own children.

Independent Study is not a way for children to cop out of learning; it is a means to increase learning. San Juan Ridge Elementary School requires parents who want to educate their own children to provide a learning experience equivalent to or better than the one offered at school. The key word is *learning* — Independent Study children must learn, but how and what they learn is up to them and their parents.

Independent Study is individualized education with a big "I." The teacher-student ratio is one to one. Students study programs that fit their specific needs. Students who are behind in basic skills use Independent Study to catch up. Students who wish to move ahead of grade level forge on, without having to wait for the rest of the class. Studies may be highly structured or amazingly loose.

The educational potential of Independent Study is limitless. The school day can run 24 hours. Studies can encompass any special interest. Learning can be totally self-directed, totally creative.

Parents choose Independent Study for a variety of reasons. San Juan Ridge families who are remotely located use the program because they have difficulty getting their children to school. Families who travel use the program while on the road. Spiritually oriented families use Independent Study to incorporate religious values into their children's curriculum. Such religiosity is not permissible in public school classrooms, yet is totally legal within the home on Independent Study. Actually, any subject can become the focus for knowledge. One family built their child's entire Independent Study curriculum around horses — horse math, horse literature, horse science — a complete equestrian approach appealing to the animal lover in question.

But horses and holiness are not the primary appeals of Independent Study. The foremost reason parents opt for Independent Study stems from their critical view of the public school learning environment. "Warmed-over television" is how one parent describes his children's previous classroom experiences. He has had his children learn at home for several years and would never send them back to the school. "Why would I send children I love to a place where their creativity would be stifled?" he queries. Another Independent Study father states, "The public school classroom destroys whatever instinct for learning a bright child might have. Children learn to do their homework and give rote responses, but how many are stimulated enough to open a book on their own, just for the sake of learning? How many intelligent discussions occur, just for the sake of thinking?"

Besides complaining about educational inade-

Geeta Dardick lives in North San Juan, California, where she teaches her own daughter, Samantha. —*Jay Kinney*

GEETA DARDICK

Pam Robinson has turned the family kitchen into a full-fledged classroom. Tyler (4th grade), Toby (2nd grade), and Penny (kindergarten) are all on the Independent Study program.

quacies, most Independent Study parents are extremely critical about the negative social influences which are experienced by young children in public schools. "I don't like how kids interact in school situations. They are really nasty," says the mother of two children on the Independent Study program. A mother of four young children also disapproves of the type of socialization that takes place in school. "I know eventually my children will have to go out in the world and learn about meanness, ugliness, fighting and bullying," she says, "but I'd prefer they wait to experience those negative influences until they are ready to handle them. Kids at school are cruel to each other. Who needs that kind of vibration in their most formative years?"

Considering the heavy objections that Independent Study parents have toward the public school, it is quite admirable of San Juan Ridge Elementary to offer them a legal exit. Perhaps the school is just a bit relieved to get such sharply critical parents off its back. Or perhaps the school likes to collect the daily attendance money for students who aren't even present. Indeed, an understanding of the financial profits of Independent Study should motivate other public schools to initiate such economically beneficial programs.

Although orthodox home-study advocates might wince at public-school-sponsored Independent Study because of its inherent paper pushing — time cards, testing, tallies (the school must constantly prove on paper to the State that the Independent Study children are actually learning) — there are certain real advantages in being associated with a public school. Independent Study parents can consult freely with the teaching staff. They can receive help designing curriculum, finding appropriate books and materials, solving special academic problems. San Juan Ridge School currently assigns a credentialed teacher to the Independent Study families to serve their various needs. This teacher is available for tutoring, correcting homework, helping parents improve their teaching skills. Such a resource person is especially appreciated by parents teaching "the basics" to young children. Another plus for school sponsorship is that it allows Independent Study children opportunities for socializing with their contemporaries. Learning at home does not have to be totally isolating. At San Juan Ridge, Independent Study students can make arrangements to visit their theoretical classrooms on a regular basis. My daughter attended her eighth-grade class once a week, strictly in order to maintain her friendships. She also went on all the field trips — skiing at Tahoe, sightseeing in San Francisco. The class joke was: "Samantha just comes to school for

The Independent Study teacher, Marilyn DeVore, sits at her desk at the front of an empty classroom. All of the children on her class list go to school at home.

the fun stuff." Independent Study students can use the libraries and computers, take art, drama, foreign language, sports, whatever is being offered at school. They can use the school programs they find positive to supplement their home study. They can go on Independent Study one year and return to school the next. They have the best of both worlds.

The school board at San Juan Ridge Elementary adopted Independent Study unanimously back in 1978 in order to broaden its educational offering. Over the years changes have occurred in the administration of the program with regards to how much teacher time will be allotted Independent Study and how much funds Independent Study parents can spend for materials, but the general goal of the program — its basic independence — remains unchanged. According to the state of California's Program Manager for Alternative Education and Independent Study, Dr. Lynn Hartzler, Ph.D., "There is no reason for schools just to use school buildings for education. Schools should be concerned with education in general. Since there is plenty of research to show that it is no disadvantage for children to be home taught, Independent Study can definitely be used by schools as an educational tool."

The San Juan Ridge Independent Study parents realize that they are privileged to be involved with one of the first public elementary schools in the country to implement Independent Study. The school is currently receiving many requests for information from other districts across the country asking how to set up such a program. Public school Independent Study will undoubtedly become more commonplace during this decade.

But persons who want to have their public schools sponsor Independent Study programs cannot just sit around waiting for this to happen. They must take action. They must politely yet firmly convince the powers that be that Independent Study is a great idea that benefits schools and children.

The parents at San Juan Ridge are extremely lucky that a past school board created an Independent Study program without any parental pressure whatsoever. In fact, the presence of the program acts as an inspiration and incentive for parents to try something new and daring with their children. Many parents might never consider Independent Study if an official, legal program didn't exist. Once they try it, they tend to become strong advocates.

There is really no reason why parenting should be separate from educating. Why draw a line between the two? Parents who secretly long to teach their own children should be doing it. In a permissive society such as ours, it seems obvious that people who want to educate their own children have the right to do so — morally, ethically, intrinsically, legally. After all, whose kids are they anyway?

Although a school district's motivation for Independent Study might not be altogether altruistic, it is a definite benefit for parents who want to teach their own children to live in a district which sponsors Independent Study. As long as the schools are careful not to destroy the flexibility and the freedom of the Independent Study programs they create, school sponsored Independent Study will very possibly improve the educational calibre of future generations. Somebody should do something about the mediocre level of public education, and schools might as well let parents try their hands at this challenging job. Who knows, even the parents may come out better educated in the process.

An Outline for Presenting Arguments for Independent Study to Local Elementary School Boards

GEETA DARDICK

BONUSES OF INDEPENDENT STUDY FOR SCHOOLS

- **Increases school budget**
  Independent Study programs bring in more revenue than they cost — they are money makers for schools

  The school can receive money for students who are enrolled in Independent Study, but not present at school

  By enrolling persons who used to be truant due to travel, remote home location, or dissatisfaction with school programs, Independent Study raises extra revenue

- **Solves school overcrowding**
  Independent Study solves overcrowding problems by allowing children to go to school at home

  Independent Study can reduce the need for additional classrooms and/or teachers

- **Broadens curriculum and alternatives offered by school**

BONUSES OF INDEPENDENT STUDY FOR PARENTS/COMMUNITY

- **Independent Study strengthens family ties**
- **Involves parents with the school in the educational process**
- **Keeps parents in tune with their child's personal growth and educational goals**
- **Parents join with their children on fascinating educational projects**
- **Parents and children learn together**
- **Increases community involvement with youth — Independent Study children and parents often look toward the community as an educational resource**

EDUCATIONAL BONUSES FOR CHILDREN ON INDEPENDENT STUDY

- **Students who are behind are able to catch back up with their grade level; parents act as tutors, releasing classroom teacher from this time consuming duty**
- **Previously unmotivated student may find area of special interest and turn on to learning**
- **Advanced students are able to move ahead at own pace, and are no longer held back by the rest of the class**
- **Children who have trouble maintaining positive peer relationships often feel happier on part time or full time Independent Study — solves disciplinary problems**
- **Children can pursue their own interests at their own pace; they can stay with one topic and exhaust the possibilities for learning**
- **Testing results show that Independent Study children still do as well as or better than their classmates on the State tests — they are definitely able to remain at grade level** ■

Better Than School

Visit any public school first-grade class, and you will see many children like Nancy Wallace's son and daughter at that age — children who can't sit still, who write their letters backward, scribble idly on endless mimeographed work sheets, or — God forbid! — furtively read ***Treasure Island*** *instead of "staying on task."*

Within a few years, these children will have been certified by the school as dyslexic, hyperactive, emotionally disturbed, learning disabled, developmentally handicapped, or afflicted with minimal brain dysfunction. The problem, the experts say, is not in the school, but in the child. (Consider the analogous absurdity of attempting singlehandedly to train a room full of puppies to sit and heel — would the failure lie in the training method or in the puppies?)

After watching their lively, intelligent son wither in the classroom for over a year, Nancy and Bob Wallace took him out of school to teach him at home. Already an avid reader, Ishmael quickly and joyously advanced far beyond his "grade level." Growing up with her brother's exuberance for learning, his little sister was ill-adapted for school by the time she was six and chose to stay home, too.

Better Than School *is one family's experience with home schooling. It is as much a tale about bureaucratic oppression as it is a chronicle of constant experimentation, excitement, mistakes, and triumphs as the entire family is caught up in the adventure of learning. Schedules, priorities, and lifestyle evolve with their self-confidence and commitment.*

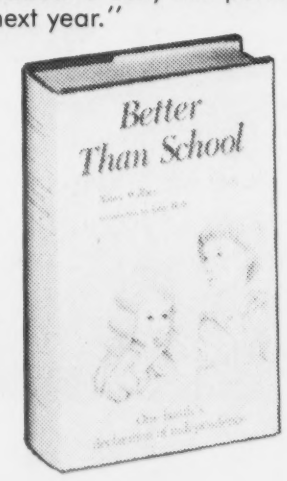
This is not an instruction manual for home teaching, but a book of inspiration and encouragement to parents wishing to educate their children — and themselves — in their own unique ways. For educators and other "experts," it offers a rare glimpse of the extraordinary capabilities lurking in the most ordinary — or even learning disabled — child. The Wallaces' experience, in particular with the Suzuki method of teaching music to parent and child together, suggests some positive, effective directions for public education. —*Carol Van Strum*

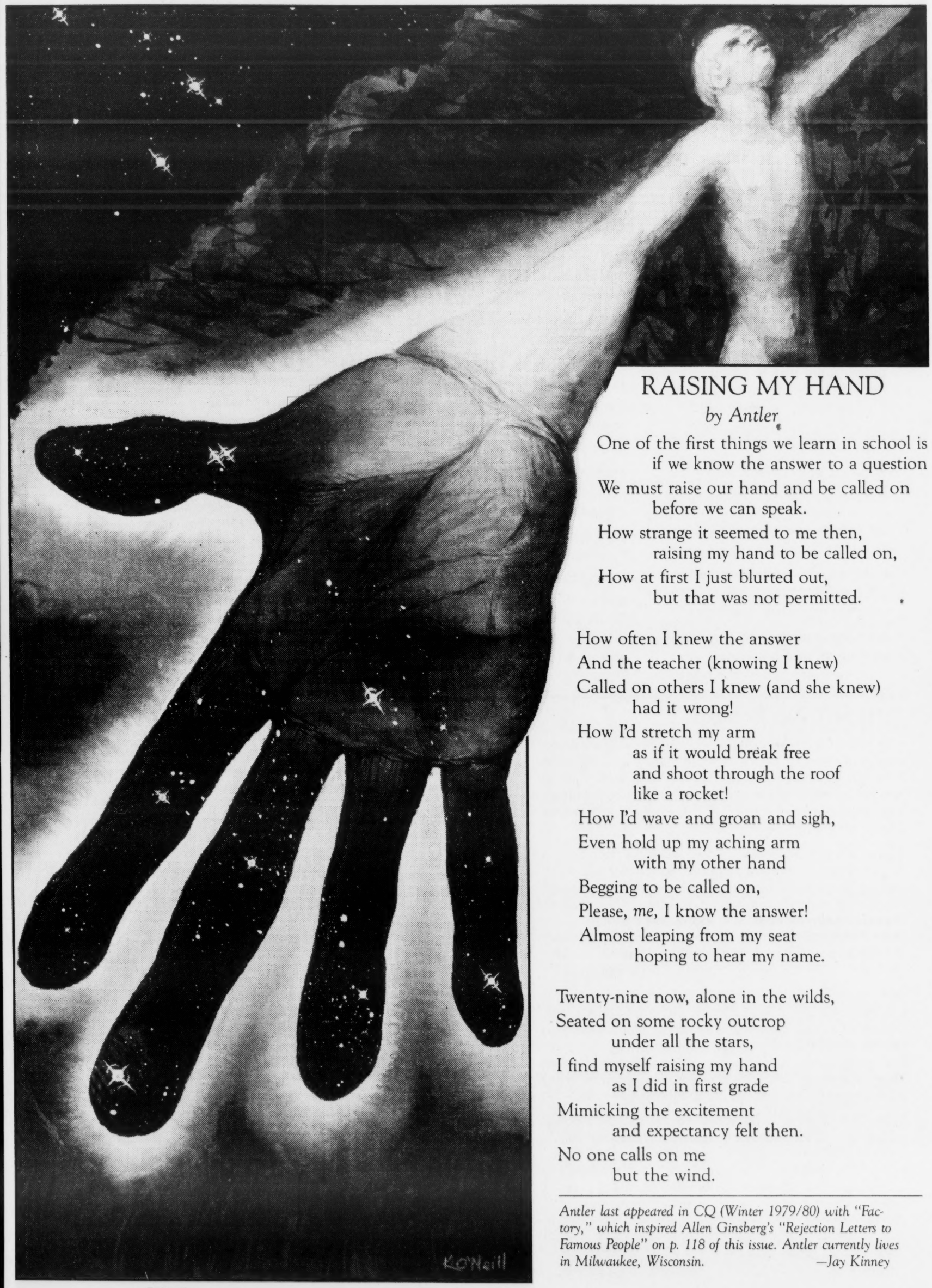
•

As usual, the school board ranted. They seemed primarily to be disgusted that Ishmael was doing so well. "You must push Ishmael too hard," one board member accused, and others seemed to be outraged that we allowed Ishmael to make choices about what he wanted to learn. We just sat there. After all, there wasn't much we could say.

They did finally grant us permission to teach Ishmael at home for another year. They knew they had no other choice. It wouldn't have looked good to say, "Ishmael has been learning so much and appears to be so happy at home that we have decided to deny him permission to learn at home again next year."

Better Than School
Nancy Wallace
1983; 256 pp.
$14.95
postpaid from:
Larson Publications
4936 Route 414
Burdett, NY 14818
or Whole Earth Access





RAISING MY HAND

by Antler

One of the first things we learn in school is
if we know the answer to a question
We must raise our hand and be called on
before we can speak.
How strange it seemed to me then,
raising my hand to be called on,
How at first I just blurted out,
but that was not permitted.

How often I knew the answer
And the teacher (knowing I knew)
Called on others I knew (and she knew)
had it wrong!
How I'd stretch my arm
as if it would break free
and shoot through the roof
like a rocket!
How I'd wave and groan and sigh,
Even hold up my aching arm
with my other hand
Begging to be called on,
Please, *me*, I know the answer!
Almost leaping from my seat
hoping to hear my name.

Twenty-nine now, alone in the wilds,
Seated on some rocky outcrop
under all the stars,
I find myself raising my hand
as I did in first grade
Mimicking the excitement
and expectancy felt then.
No one calls on me
but the wind.

Antler last appeared in CQ (Winter 1979/80) with "Factory," which inspired Allen Ginsberg's "Rejection Letters to Famous People" on p. 118 of this issue. Antler currently lives in Milwaukee, Wisconsin. —*Jay Kinney*

Popular Communications

Popular Communications *covers "scanners, shortwave broadcast and utility stations, pirate and clandestine broadcasters, RTTY monitoring, survivalist communications systems, FCC news, wiretapping and bugging, wire scrambling/unscrambling, surveillance/undercover communications, satellite and cable TV accessories, sophisticated telephone devices" and radar detectors. It offers information not readily available elsewhere, interesting ads, and product and book reviews. Recent articles have included: "U.S. Border Patrol Communications;" "Israeli Military Radios: A Survey;" and "Eavesdropping on Drug Smugglers."*

Editor Tom Kneitel is author of ***Top Secret Registry of U.S. Government Frequencies*** *and* ***Energy Scan*** *(**NWEC** p. 525).*
—Walt Noiseux

•

The use of VHF and HF radio systems for all sorts of tacky activities, such as smuggling, is at an all-time high. Rarely is there a drug seizure at sea without a lot of sophisticated radio and navigational equipment involved. High frequency radios that span between 3 and 30 MHz allow these pirates to chat over thousands of miles. The lower frequencies (below 5 MHz) allow the seaborne pirates to maintain communications up to 500 miles away for contacts with nearby vessels. VHF marine and VHF/UHF ham gear can be pressed into service when the vessels are closer than 50 miles. Switching to 1 watt power allows the operators to stay in touch with one another, but limits their transmission coverage to short distances.

Not all of this activity is connected with smuggling.

Popular Communications
Tom Kneitel, Editor
$12/year (12 issues)
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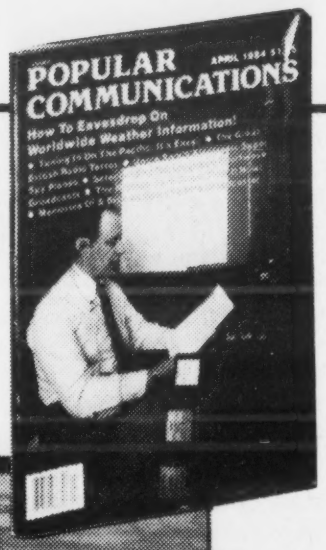
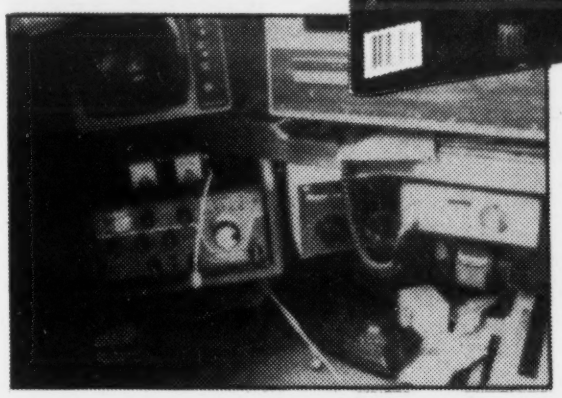
Hicksville, NY 11801





A pirate station which was in use on a drug-running boat.

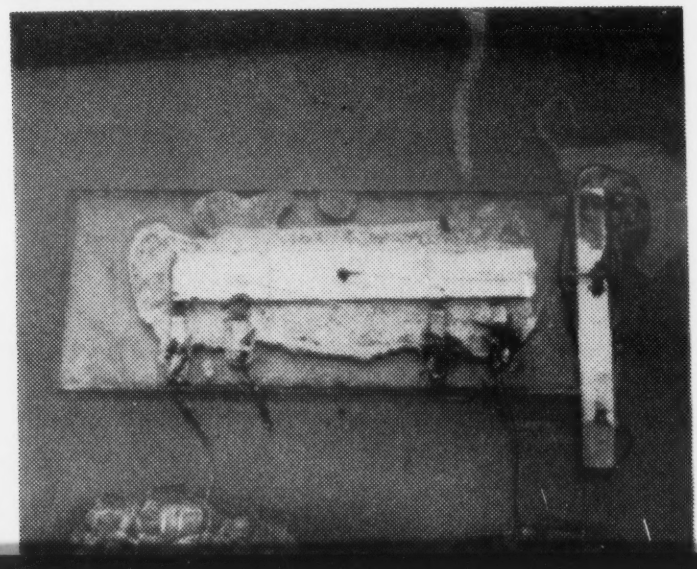
Another popular use of unauthorized frequencies/transmissions is by certain commercial fishermen. Commercial fishermen guard their fishing zones vehemently. Their locations, they feel, must be kept secret to prevent rival commercial fishermen from zeroing in on them and thinning out their catch. In order to keep communications private with their own home base, some fishermen have begun to feel that shifting to illegal frequencies is perhaps the best way to insure secrecy and privacy.

State of the Art

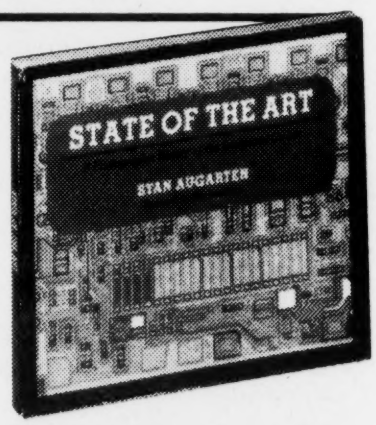
From the first transistor to the first integrated circuit to the first microprocessor to the Josephson junction (with milestones and sidesteps along the way), chronicled in 38 photographs with informative page-long captions. Ray Bradbury provides a poetic forward. Augarten's introduction describes the basics of semiconduction, logic circuits and how ICs are made, in language even a technophobe can grasp. The ICs are beautiful, of course, though robbed by the dot-screens used in color printing of the exquisite crispness of detail that characterizes the chips themselves. The early devices are simple and emblematic, the later ones so complexly packed that they defy the eye. A few electron micrographs showing chips in ultraclose-up should have been included to extend the representation of detail to the available limit. And the cover price is steep. Quibbles aside, the selection of images is well-informed, the subject momentous. *—Robert Horvitz*

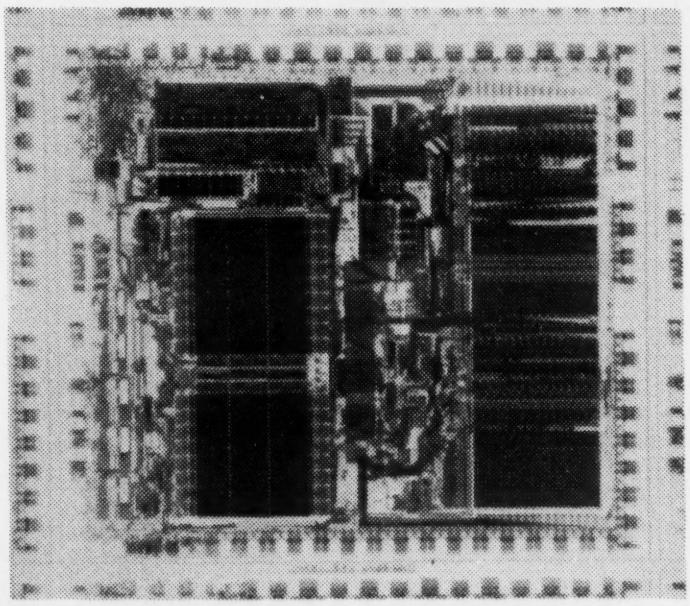
The Microelectronic Revolution Begins: The First IC, Texas Instruments

The first IC was made out of a thin slice of germanium (the light blue rectangle) and contained a single bipolar transistor (under the large aluminum bar in the center). It had four input/output terminals (the small vertical aluminum bars), a ground (the large bar on the far right), and wires of gold. The assemblage was held together with wax. The photo's blue tinge was created by a light shown on the chip. Actual size: 0.040 x 0.062 inches.



State of the Art
(A Photographic History of the Integrated Circuit)
Stan Augarten
1983; 94 pp.
$9.95
postpaid from:
Ticknor and Fields
383 Orange Street
New Haven, CT 06511
or Whole Earth Access





One of the Most Powerful 16-Bit Microprocessors: The Motorola 68000

The 68000 can multiply two 16-bit numbers in a mere 3.2 millionths of a second — fifty to sixty times faster than 8-bit microprocessors like the Intel 8080. Eight-bit microprocessors can multiply only by repeated addition, whereas 16-bit microprocessors can contain circuits that enable them to multiply numbers in only a single operation. Actual size of the 68000: 0.246 x 0.281 inches.

The Letter Exchange

If you thought letter-writing was a dying art in these post-literate days of telephones, computer networks, and quickie postcards, here's a charming little publication determined to prove you wrong. ***The Letter Exchange****'s raison d'etre is to encourage the honorable art of correspondence. It does this through a simple device: short listings are printed from people who want to correspond on specific subjects, such as classical music, Lionel Trilling's essays, androgyny, or freighter travel. Readers can initiate letter exchanges with any listing, though the respondents' initial letters are forwarded through the directory to the listees, to protect listees' privacy. Once the listee replies directly, the correspondence is on its own. The cost of subscription to* ***The Letter Exchange*** *is the only fee.*

Editor Stephen Sikora notes how ***The Letter Exchange*** *and its users differ from the more familiar "personals" columns around: "You will find a wide range of interests in this directory. The one thing we letter-writers do share in this diversity of political, religious, and cultural viewpoints is a taste for the simple pleasure of letter-writing* itself. ***We seek in these pages no other social contact or personal encounter.*** *" Sample issues are $2 each.*

—Jay Kinney

•

Since becoming involved in the Letter Exchange, I have been astounded to realize that although I am a prolific letter-writer, most of the letters I write and receive fall into Mullins's category of "Suzie has cut yet another tooth."

I consider myself to be an educated person; I've a college degree, a professional career, and I am involved in the fine arts. But I have discovered over the years that if I do mention a controversial subject or a personal opinion, I simply do not get a response.

A professional woman who has been my friend for years recently replied to a letter I'd written to her about the womens movement. "I don't discuss politics or religion," she said. It boggles the mind. Why is it that so many intelligent, well-educated people are afraid to discuss the subjects which are the very essence of our existence?

This is one of the reasons I'm glad I joined in here. I hope that I acquire some correspondents who care about something other than Suzie's new tooth! —N.C.

The Letter Exchange
Stephen Sikora, Editor
$5/three issues
(published irregularly)
from:
The Readers League
P.O. Box 6218
Albany, CA 94706

•

Letters & Gifts

"The gift must always move," writes Lewis Hyde in a recent book about gift-giving in other cultures and the role of artists and writers in our own (*The Gift: Imagination and the Erotic Life of Property,* Random House, 1983). Mr. Hyde suggests that we view a writer's work like gift-giving: passing on to readers one's own gift of imagination.

How this can actually be done in the marketplace of literature, where a writer's 'gift' is bought and sold, remains unclear. But Hyde's comments apply very neatly to one particular kind of literary gift-giving: personal letters. In the exchange of correspondence the gift of imagination moves very freely, indeed.

Exchange, in fact, is paramount. A single letter which draws no answer is hardly worth the name, much less the effort taken to write it. Response is everything: the letter must always move.

•

316A. Has anyone ever read *The Great Books of the Western World*? I've always wanted to, but have yet found neither personal discipline nor a support group to encourage me. Is it worth reading from this series and discussing the reading via letters?

311B. Deism has intrigued me for some time. Who can tell me more about it? Is it true that Thomas Paine, Ben Franklin, and Thomas Jefferson were deists?

311C. Does anyone want to correspond about freighter travel? Or teenagers, non-fiction books, illness, or just about anything else under the sun? Drop me a line.

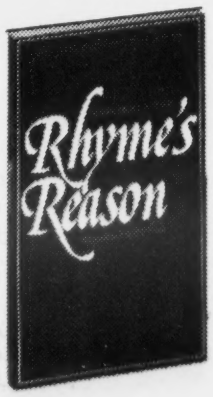
328B. Someone who has lived in Australia please tell me more about that wonderful country.

Rhyme's Reason

I love finding thin books that are plump with information. John Hollander's introduction to poetic structure in English offers a clear, precise, and most pleasing way to learn. ***Rhyme's Reason*** *is not a textbook full of dry lessons, quoting old masters, but instead a rather rare example of verse form. His explanations are themselves illustrations, lessons in verse. The book becomes a kind of epigram, inciting our imaginations with wit, satire, and parody. A book where serious thought, ornate fun, technical mastery, and intuitive insight are never but one. Hollander turns back to that most ancient and serious form of instruction, play.*

—Rod Wilson

Rhyme's Reason
(A Guide to English Verse)
John Hollander
1981; 51 pp.
$4.95
postpaid from:
Yale University Press
92A Yale Station
New Haven, CT 06520
or Whole Earth Access



•

In couplets, one line often makes a point
Which hinges on its bending, like a joint;
The sentence makes that line break into two.
Here's a *caesura:* see what it can do.
(And here's a gentler one, whose pause, more slight,
Waves its two hands, and makes what's left sound right.)

•

Let us consider the ways in which syllables themselves can reach through, or across, lines. They can *alliterate:*

Alliteration lightly links
Stressed syllables with common consonants.

And they can, without actually rhyming, exhibit *assonance:*

Assonance is the spirit of a rhyme,
A common vowel, hovering like a sigh
After its consonantal body dies.

•

Translating Omar Khayyam's *Rubaiyat,*
Edward Fitzgerald, it would seem, forgot
To rhyme the third line with the other ones.
(The last line underscored its lonely lot.)
He didn't, really: I meant no aspersion.
His gloomy quatrains were an English version
Of just that rhyme scheme (and God knows what else)
He found in the original in Persian.

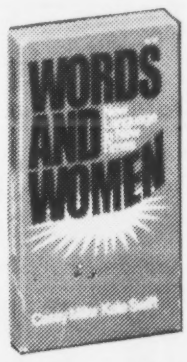
Words and Women

The Handbook of Nonsexist Writing

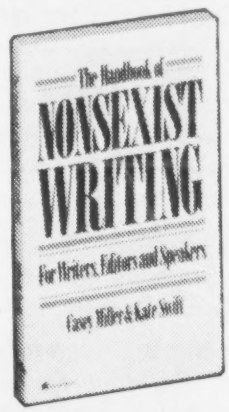
Thanks to radical politics and feminism, I dumped sexist language at the same time I dumped racist language, about 13 years ago. I'm still somewhat surprised that people who wouldn't dream of calling an adult black man "boy" have no problem referring to an adult woman as "girl." My five-year-old daughter's a girl, her mother isn't, and neither are really included in mankind *or the generic* he *if words mean what they say. As George Orwell put it, "Let the meaning choose the word, and not the other way about."*

In ***Words and Women****, Casey Miller and Kate Swift have done a marvelous job of tracing the history of sex bias in the English language, from words' origins in other languages through their evolution in usage and meaning from Anglo-English (or Old English) to twelfth-century Middle English to present-day English. Anyone who loves language in general will be fascinated by this well-researched and well-presented study. If you've already banished sexist language from your repertoire, this book will bolster your convictions and help you back up your arguments for others to do the same. If you think this is a trivial issue, I bet Miller and Swift's commonsense reasoning will change your mind.*

The Handbook of Nonsexist Writing *contains some of the background info included in* ***Words and Women****, but it's mainly a how-to guide for when you're scratching your head thinking, "Now how the hell can I say this without being sexist?" All the everyday, taken-for-granted words, terms, and phrases are dealt with, and you'll be amazed at how easy it is to change them so they're fair and accurate. My copy sits on my desk right next to the dictionary and thesaurus.* —*Dave Potvin*



Words and Women
(New Language in New Times)
Casey Miller and Kate Swift
1977; 177 pp.
$3.95
postpaid from:
Anchor Books
Doubleday and Company
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth Access



The Handbook of Nonsexist Writing
(For Writers, Editors and Speakers)
Casey Miller and Kate Swift
1981; 134 pp.
$5.45
postpaid from:
Harper & Row
2350 Virginia Avenue
Hagerstown, MD 21740
or Whole Earth Access

•

At one time English also had separate and unambiguous words to distinguish a person by sex: *wif* for a female, *wer* and *carl* for a male. *Mann* — a human being — dropped the second *n* in combined forms like *waepman* and *carlman*, both of which meant an adult male person, and *wifman*, an adult female person. *Wifman* eventually became *woman* (the plural, *women*, retains the original vowel sound in the pronunciation of the first syllable), while *wif* was narrowed in meaning to become *wife*. But *wer* and *waepman*, *carl* and *carlman* simply became obsolete; they were no longer needed once *man* was used to signify a male — especially. One cannot help but wonder what would have happened to the word that originally meant a human being if females rather than males had dominated the society in which English evolved through its first thousand years. Would *man* still mean a human being, but especially an adult female?

—***Words and Women***

•

Among the devices Lakoff cites as typical of women's language is the tag question. Rather than making a simple strong statement — "War is terrible," for example — a woman might say, "War is terrible, isn't it?" giving the impression that she is unsure of her opinion, is reluctant to state it flat out, and is asking for confirmation. Another pattern found only among women, Lakoff believes, is a speaker's use of the rising inflection that indicates she is asking a question when actually she is giving an answer. In reply to "When will dinner be ready?" for example, she may say, "Oh — around six o'clock?" as though adding "if that's okay with you, if you agree." Again, the effect is that the speaker is unsure of herself, unable to make up her mind, and not to be trusted with real responsibility.

Lakoff points out that by seeming to leave decisions open and not imposing a viewpoint on others, women's language comes off sounding more polite than men's. As a tag question is a kind of polite statement, a request is a polite command that does not force obedience. So where a man might say, "Please close the door," or "Close the door," a woman is more apt to say, "Will you please close the door," or "Won't you close the door?" suggesting in either case that the decision is up to the person addressed rather than to the speaker.

—***Words and Women***

•

When explaining whether something has been made by women, men, or both is irrelevant — and it usually is — various sex-neutral alternatives to *manmade* are available, including *handmade, hand-built, synthetic, manufactured, fabricated, machine-made,* and *constructed*.

> The cave appears to be natural, but it was completely excavated by hand (*or* built by hand *or* hand-built).
>
> All materials in these shoes are synthetic (*or* manufactured).
>
> Since the showcase is only two feet deep, the illusion of great depth is simulated (*or* cleverly created).

Another solution is to omit the adjective entirely. Using an earlier example:

> The only water supply is a pond the villagers created by damming a small stream.
>
> —***The Handbook of Nonsexist Writing***

•

A variation of *girl*, often used by writers or speakers who sense that *girl* would be resented, is *gal*. Since *gal* is *girl* in disguise, using it is apt to be an out-of-the-frying-pan-into-the-fire solution. However, *gal* may possibly be useful in the kind of context that makes *guy* acceptable (a "guys and gals" sort of ambience), and it can sometimes serve well when deliberately chosen for its incongruity. Referring to an active ninety-year-old as "a feisty old gal," for example, might be paying her a greater compliment than "feisty oldster" or "plucky senior citizen" would ever succeed in doing.

—***The Handbook of Nonsexist Writing***

There's a tale to tell behind this piece: Back in **CoEvolution** *No. 24 (Winter 1979/80) we ran long excerpts from poet Antler's excellent epic poem, "Factory." Allen Ginsberg thought highly of the work and sent it along with his recommendation to Jason Epstein, editorial director of Random House. As you'll note in the letter reprinted below, Random House did not exactly jump at the chance to publish "Factory." Instead, Jason's note to Allen was the grain of sand whose irritation led to these humorous pearls, which accompanied Allen's letter in reply. Allen and Antler later showed them to us, and they still made us laugh when we recently ran across them again. We think they're too good to remain unpublished. "Factory" was subsequently published as No. 38 in City Light's Pocket Poets series ($4.20 postpaid from City Lights, 261 Columbus Avenue, San Francisco, CA 94133). For a new poem by Antler, see p. 117 in this issue.* —*Jay Kinney*

REJECTION LETTERS TO FAMOUS PEOPLE

by Allen Ginsberg

Illustrated by Jay Kinney

RANDOM HOUSE, INC.
201 EAST 50TH STREET, NEW YORK, N.Y. 10022
TELEPHONE 212 572-2268

JASON EPSTEIN
VICE PRESIDENT
EDITORIAL DIRECTOR

8 April 1980

Dear Allen:

I've now read "Factory" and I have passed it around to some of the younger people here as well, but without encouraging results. The people here were not as impressed by the verse as I had hoped they would be, and, though no one here would defend factories as agreeable places, no one can imagine how the world would work without them, especially since the author doesn't supply an alternative vision or possibility. Here at least, where much of the city is unemployed and some are starving and where many houses have collapsed and for many there's nothing to do, we would have a hard time convincing people that the few remaining factories here are awful places that should be closed.

Let me know when you come to New York next. I'd like to see you after all these years.

Yours ever,

Jason Epstein

Dear Jason:

I enclose a few sample rejection letters that may cast light on your note about Antler. I hope you haven't lost your sense of humor.

There **is** a built in absurdity in your replies, you know. You've been in Manhattan's factories too long. . . .

I've finished editing another excellent unpublished poet — David Cope. Want to read it?? It's been 4 months part time of my work with students here.

OK —
Allen Ginsberg

Dear Mr. Spengler:

Your interesting volume describes the "Decline of the West" but gives no hint how to avoid this unfavorable development.

Dear Mr. Tolstoy or is it Dostoyevsky:

This new gloomy work of your middle period seems to condemn man to perpetual despair and black psychology but offers no alternative to the dolorous picture you carefully paint.

Dear Mr. Christ:

When you say your kingdom is not of this world, if we may take you literally, you condemn yourself to be a party of one with irrelevant insights. We do need a philosophy we can live with, I'm sure even you'll agree.

Dear Mr. Kerouac:

If everybody were traveling around in cars, who would pump the gasoline?

Dear Mr. Mallarmé:

If everybody were able to attend your precious Tuesday Teas all the time, I'm sure we would all be charmed, but who would provide the dark leaves you infuse in boiling water? And who would there be to mine coal to boil the water?

Dear Miss Carson:

Your **Silent Spring** seems to be an inconsiderate attack on our whole industrial system, even the science of chemistry itself. As you may guess, we at the reprint house, though we deplore the lamentable poisoning of certain fringes of the biota, must unwillingly agree with the review of your argument that appeared in **Time** magazine; we have to consider these issues more seriously than you are obliged to, being so specialized in your preoccupations.

Dear Mr. Buddha:

The text of your new discourses on meditation strikes us as excellent in its kind, though I must admit that few of our employees have much experience in the particular course you seem to enjoy and describe so meticulously. However if the world has to go on its business, as after all even you seem to agree on page 12 part 14 of your text, then I'm sure you understand why your recommendation to stop thinking so much seems counterproductive, as far as life's necessitous busyness requires.

Dear Mr. Einstein:

Though the notion of matter and energy's interchangeability you seem to advocate may be aesthetically satisfactory to some, we at The Scientific Printing office see no practical purpose in publishing such an abstruse theory. We have tried it out on some of our soph interns who read specialized technical matter for us, and they opine that your theory of relativity leaves no place open for reliance on some fixed point of absolute certainty. Perhaps you did not intend this effect on the reader, but

Dear Mr. Blake:

We at our Printing House in Hell cannot understand your reference to the "Satanic Mills." True, you seem to intend it as a symbol for the overrationalistic mind, yet it might be taken as a statement opposing the development of Trade and Industry which we are assured will bring the benefits of Material Wealth and Spiritual Blessings to the nations of earth less fortunate than ourselves Prospering in these British Isles. Particularly now, when the development of milled Manchester Cloth is being readied for use by the naked masses of the Indies, we feel that, partly because we can't agree with the argument of your central work "Jerusalem," we must find the somewhat loose-lined verse you sent us unworkable for our presses. I hope you find someone in Outer Mongolia to print your manuscript, which I'm delighted we had a chance to read.

Another consideration: as you may know we are part of a large organization of mills, and we operate in the fashion we do out of confirmed principle that this is the only way the human race can operate. Though there may be some flashes of insight in your latest production, they do not seem to be conducive to the humane and continued operation of the system of milling products which the world has adopted for the last half century at least as being that system most conducive to optimum progress of Mankind and universal benefit to all sentient beings.

It would not be consistent with the principles of our operations if we were to publish your book. Though certain beauties in it are admired by our staff, and some outside advisors whose opinions we occasionally receive, you can see it would be inappropriate for us to replicate your prophecies en masse. We would be dishonoring our own dignity, as we believe; with no insult to you; if we may say so.

Dear Mr. Ginsberg:

Your excellent poem "Howl" is flawed by a few extreme statements which you and we would be hard put to justify. You state: "Moloch whose fate is a cloud of sexless Hydrogen." This philosophy seems to imply that industrial civilization will inevitably perish in nuclear explosion. Though we realize the serious dangers of the present arms race, we hold no such pessimistic view of humanity as you propose, and find that we cannot agree with your conclusions.

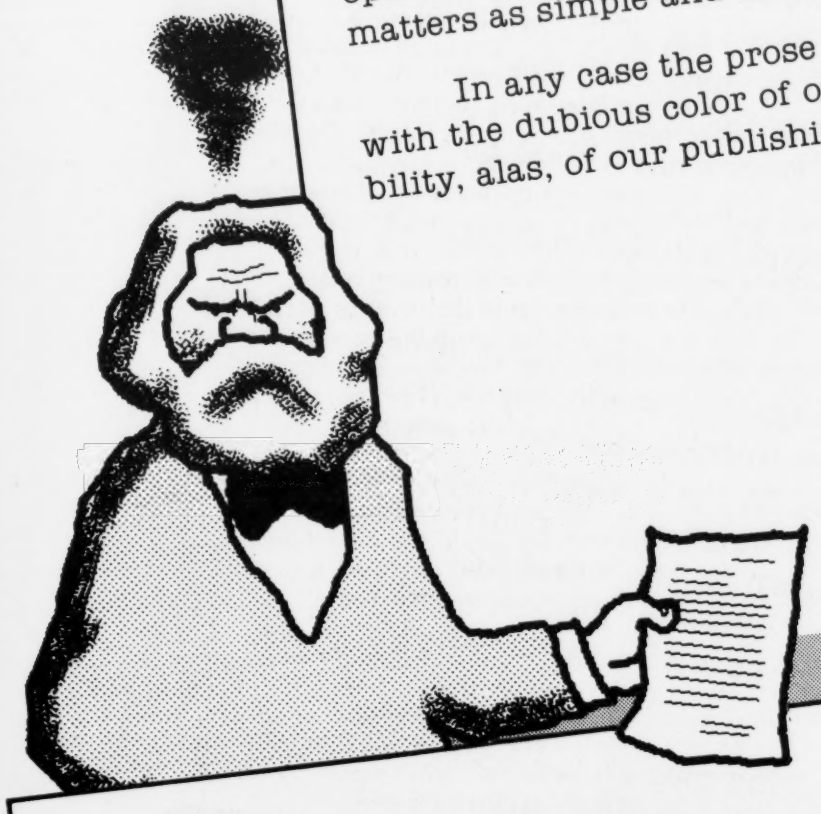
As Keats said, "Beauty is Truth." Since your statement cannot possibly be true — implying as it does the mass suicide of the best part of mankind — we do not feel that your verse qualifies as beautiful. This is simple, common logical sense.

Poetic license may be occasionally granted on the subject of flowers, but not in so serious an observation as the inevitability of a nuclear war, which you seem to be willing to state. Perhaps you have not thought out the consequences.

Dear Mr. Burroughs:

Your view of "Junk" as you present it in your pseudonomous manuscript does not accord with the opinion of recognized medical and social authorities. Certainly the entire body of official medical opinion and the Narcotics Bureau cannot be held guilty of errors in matters as simple and obvious as the dangers of addictive drugs.

In any case the prose is not as powerful as I had hoped; coupled with the dubious color of opinion the book presents, I see no possibility, alas, of our publishing your efforts.



Dear Mr. Marx:

Though you have obviously labored at length on this somewhat difficult manuscript, and though occasionally your criticisms of the present system are justified by the data you've researched so carefully (with your assistants?), your entire thrust seems to offer no reasonable alternative to the economic and industrial organization we have to live with alas now so we see no practical purpose in publishing your extraordinarily interesting work.

To be frank, what remedies you propose are often specific, but as you say, only provisional and subject to revision as you develop your theories. And where you are specific, the generalizations you make as to human nature are so abstruse as to leave no encouragement for our practical application of your basically negative insights into the admitted injustices of the present organizations.

For all that can be said against the factory system, we all do live with it and I suppose must live with it for the next hundreds of years of forseeable future.

Undoubtedly many people suffer in the mills of corruption you describe, but the mass of civilized humanity is supported by them including yourself who writes on milled paper, and it would be unprincipled not to appreciate the bounties which have been conferred on us through nature working through man and society in such an agreeable way that we may correspond despite differences of opinion.

I hope your next book is more optimistic: we're always looking for a good book. **Das Kapital**, I'm afraid, is not up to your best promise.

The Paintings of Henry Miller

By now a good many of us are aware that Henry Miller was the author of roughly 75 books, and that a few of those books got him in hot water with the censors. However, not many people realize that he was also an accomplished painter who produced literally thousands of water colors from 1926 to 1980, the year of his death. Happily, a new book has just come out which will do much to remedy this.

The Paintings of Henry Miller *is a visual and literary delight, combining 78 full-color reproductions, 18 black-and-white reproductions, 2 color photographs, as well as Henry's most important writings on the subject of water color painting.*

Although one might see a remote similarity here and there in Henry's work to that of Utrillo, Paul Klee, Pablo Picasso, or Marc Chagall, it is useless to try and pinpoint all the influences, as there are just too many of them. One might just as well say his work was also influenced by Kandinsky, Blake, Dali, Gauguin, D.H. Lawrence, Brueghel the Elder, Vincent Van Gogh, Hieronymus Bosch, Goya, Hokusai, Utamaro, Hiroshige, Renoir, Whistler, Monet, Botticelli, Seurat, Modigliani, Rousseau and Max Ernst, for undoubtedly Miller bore a tremendous admiration for the work of these men, as well as for that of 20 or 30 dozen other painters, both known and unknown.

In the 1930s and 40s Henry used to barter his paintings for whatever he was in need of at the time: a few dollars' pin money, a pair of shoes, food, brushes, paints, or paper. Nothing anyone was kind enough to send him was too little for a painting. Now, ironically enough, if you were to attempt to buy an original Miller painting, you'd be paying somewhere between two and three thousand dollars!

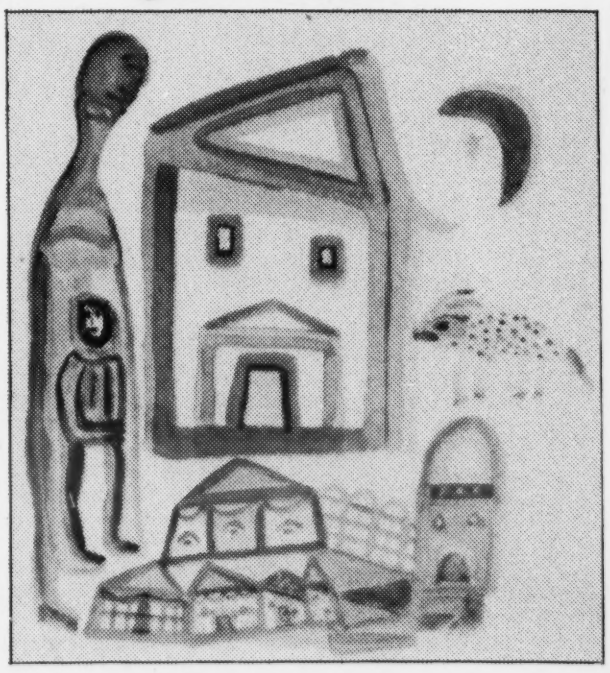
I highly recommend this book to anyone who collects Henry Miller's books, to everyone interested in modern art, and especially to those who did not previously know that Miller was a painter. Whichever category you may fall into, here is a real treat in store for you.

—Craig Peter Standish

•

Thinking back to the year 1928, when I first began making watercolors, it seems to me that if I had not discovered this outlet I would have gone insane. My writing was getting me nowhere fast, my domestic life was a shambles, and my ability to panhandle had become nil. When I found what the left hand can do — ''the left hand is the dreamer'' — I became active as an ant. I painted morning, noon, and night, and if I ran out of paint I used crayons, pencil, or hunks of coal. (Coal on blood-soaked butcher's paper always yields something interesting.) Though my mind was intensely active, for I was seeing everything in a new light, the impression I had was of painting with some other part of my being. My mind went on humming, like a wheel that continues to spin after the hand has let go, but it didn't get frazzled and exhausted as it would after a few hours of writing. While I played, for I never looked on it as work, I whistled, hummed, danced on one foot, then the other, and talked to myself. Jolly talk, what I mean. As if there were someone beside me, watching me, egging me on. If a crony stopped by to unload his woes I continued to paint while pretending to listen. Sometimes I would offer to do his portrait — for a pack of cigarettes, two bits, even a dime. Some of my friends, catching my infection, joined me in these painting sprees. Sometimes a group of us would be doing one another's portraits simultaneously. And while we slaved away — ''always merry and bright'' — we would discuss the painters we revered. During these seances we thought nothing of revising one another's work. The one who could do noses or ears well, or feet or hands, would doctor up the noses, ears, hands, and feet of all the others. We were learning in our own fantastic way, and it was fun. Now and then it was suggested that we get models to pose for us, but none of us had the means for such a luxury. Besides, it didn't take us long to realize that the presence of a nude female would only deflect us. So, in lieu of a good, sensuous piece of live, pink flesh we would slip a coat over a chair and try to catch all the wrinkles, shadows, textures, herringbone effects, and whatnot. Or we'd do hats. Hats were my specialty. Particularly slouch hats which were worn and greasy. Coats, hats, shoes, whatever we fixed on gave us a kick. Maybe the painting was only an excuse to stay indoors where it was warm and cozy, to stop looking for work — we were none of us responsible citizens — or to indulge in fertile talk. We weren't trying to get anywhere. *We were there*, were we not?

The Paintings of Henry Miller
(Paint as you like and die happy)
1982; 132 pp.
$16.95
postpaid from:
Chronicle Books
870 Market Street
Suite 915
San Francisco, CA 94102
or Whole Earth Access



GOOD MOVIES: SUMMER

by Sheila Benson

GREYSTOKE

You may never have expected a Tarzan film to offer tenderness, a defining intelligence or the sting of real emotion, but that's what **GREYSTOKE** contains, in addition to the most miraculously designed primates we've yet seen on the screen. (They are the work of the great Rick Baker.) **Chariots of Fire**'s Hugh Hudson was the director, and this film is as old-fashioned as his first, and as endearing. Whether you like the jungle or the "civilized" half of the film depends on whether you are more fascinated by apes or by people.

The film is carried by three performers — by Frenchman Christopher Lambert as John Clayton; by Ralph Richardson in his last, glorious hurrah (his exit to cinema immortality is made sliding down the baronial stairs on a tea tray), and by Ian Holm, as the Belgian who is Clayton's bridge to the world. (You may not even recognize Holm, **Chariot**'s coach, Sam Mussabini.) The film's greatest gift is a return to real wonder on the screen; its vision is enthralling.

★ ★ ★

L' ARGENT

L'ARGENT is only the 13th film of Robert Bresson's astringent 76-year career but it may be the most lasting, even in the company of his **Pickpocket** or **Au Hazard Balthazar**. With a Tolstoy story as his starting point, he builds an inexorable tragedy in a style pure as photographed architecture. A young upper-middle-class French boy is refused his allowance and in the string of occurances that grow from this, a laborer with a wife and young daughter is pushed from the bounds of his orderly life into a precipitous slide.

It is useless to protest the unrelieved bleakness of Bresson's view of contemporary bourgeois life; his film is spare and beautiful, as relentless as it is unarguable.

SUGAR CANE ALLEY

★ ★ ★

There is a little awkwardness in the beginning of the radiantly fine **SUGAR CANE ALLEY**, by Martinique director Euzhan Palcy. That's because, amazingly, all but two of her cast were nonprofessionals and as she shot in sequence they loosened up in their roles. This is a classically familiar story about a young person who has it in him (or her) to make something of himself because of a gift. In this case it's adapted from the autobiographical book by Joseph Zobel, whose grandmother labored in the sugar cane fields to allow him the rare chance at an education. You can appreciate the film on several levels: for the love and poetry and knowing detail Palcy gives every corner of her characters' lives; for its straight-faced, heartbreakingly understated presentation of the French oppression in those cane fields in the 1930s; or for the triumphant humanism of its portrait of M'an Tine, Joseph's grandmother, by actress Darling Legitimus. It won her the Best Actress at Venice, and seeing her you will understand why. (There is a fourth reason, which is the 29-year-old director's 15-year struggle to get the film made at all, but that is a story of its own.)

Go to any lengths to seek out this movie; you will not be able to forget what you have seen.

REPO MAN

★ ★ ★

If Universal, the distributing studio, has anything to do about it, you may never be able to see **REPO MAN** at all. It fell in the crack between an outgoing and an incoming regime, and it's our loss, because young director-writer Alex Cox's wit is fresh and virulently funny and his actors are wonderful. We watch Emilio Estevez as a young L.A. punker who inadvertently becomes an auto repossessor under the careful tutelage of repo master Harry Dean Stanton, that dour, burning icon of lowlife.

The film's targets are cults, punks, UFO-crazies, the nuclear bomb biz, credit buying and generic can labeling, and I think I've left out a few. It's brisk, irreverent, collectable. Cox may be a real discovery, if anyone is allowed the chance to see his film.

THE BOUNTY

★ ★ ★

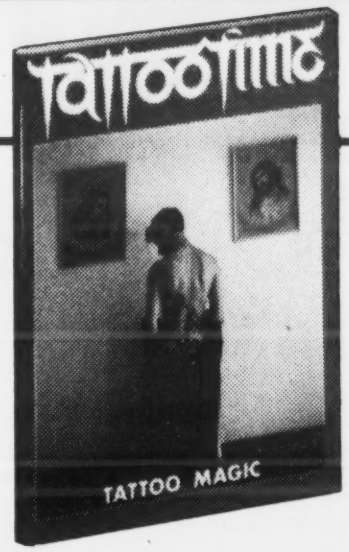
I add **THE BOUNTY** to this list with very mixed feelings: I think it has a gaping hole where Fletcher Christian should be, and (like **Greystoke**) it needs to be longer, not pruned down so exhibitors can have more showings per night. But Robert Bolt's screenplay and New Zealand director Roger Donaldson's revisionist approach to this classic conflict between duty and authority is certainly interesting. (We learn that class differences and repressed sexuality were at the heart of Bligh's problems, and Anthony Hopkins conveys this intelligently, if sweatily.) Mel Gibson is, surprisingly, the film's weak link, and forget about the film after the two set out in their respective boats, but the action at Cape Horn is terrific. And there are always the native girls in Tahiti, which looks like Club Med without the payment beads. ■

Content **Style** **Consequence**

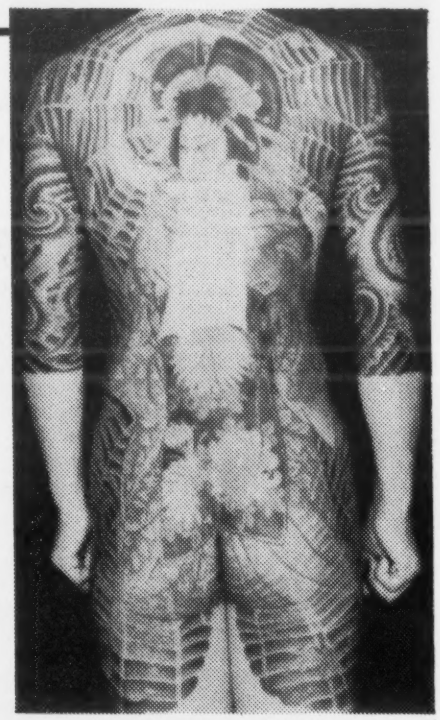
Tattootime

I always thought tattoos were limited to crudely-rendered three-masted schooners and American eagles with talons clutching banners emblazoned with "MOM." This magazine blew away my preconceptions with some full-color fireworks. Uninitiated to the subject as I was, ***Tattootime*** *introduced me to the rich complexity of the tattooists' ancient art. Devoted to the goal of putting "present day tattooing into a historic and cultural context," it explores its multifaceted subject with articles and abundant photographs that depict the colorful designs that adorn the many tattooed bodies of our world.*

Tattoos and tattooists, not tattooed people, are the focus of ***Tattootime****. Articles focus on such subjects as the magical and religious tattoos of various cultures, including Thailand and Japan, sacred calligraphy in tattoos, interviews with tattoo artists, photographic overviews of such particular tattoo subjects as dragons, and "how-to" instructional articles for tattooists. This is no detached academic journal. The subject is exceedingly alive in these pages, reflecting, no doubt, editor Ed Hardy's enthusiasm and reverence for his subject, which he regards as a magical and mystical art currently undergoing a renaissance in this country.* —*Ted Schultz*



Tattootime
D.E. Hardy, Editor
$6.95/year (1 issue)
from:
Tattootime Distribution
1850 Union Street
Suite 136
San Francisco, CA 94123



In Japan, people are tattooed with large, complex images of layered symbolic force. Figures from history and legend (often inseparable in Japan) rank high in popularity. Chief among them are NINJA YOKAI — adepts of NINJITSU, the most secret and magic of all martial arts, the Way of spies and assassins. Often credited with superhuman powers, various historic ninja were said to possess animal "familiars" they could transform themselves into. They are usually depicted clutching scrolls inscribed with their mystic formulas.

Content **Style** **Consequence**

Exquisite Corpse

I'll admit it: I'm no fan of the published output of most university English departments. While I support the notion of "little magazines" giving voice to creativity that doesn't fit within narrow commercial boundaries, I rarely feel like curling up with the results. But then I'm chronically on the verge of media burn-out, anyway, so there's a distinct chance my palate is jaded.

Be that as it may, here's ***Exquisite Corpse*** *from (yes) the English Department of the University of Baltimore, and it . . . er . . . tastes great. A tall and skinny 12- to 20-pager (16" x 6"),* ***E.C.*** *comes out monthly and has a crackling mix of critiques, reviews, gossip, poems, local scene reports from 'round the world, and plenty of intellectual wit. Nothing is over two pages: most things are a quarter-page or less — just right for tantalizing without boring.*

It's possible, of course, that prodded on by TV commercials and short-term memory decay, ***Exquisite Corpse*** *is simply the logical result of post-modern post-literature trying to hold its own in a post-literate age. It's also possible that it is simply a good lively paper willing to take risks.* —*Jay Kinney*

[Suggested by Sam Abrams]

Exquisite Corpse
Andrei Codrescu,
Lawrence Markert,
Editors
$10/year (10 issues)

from:
Exquisite Corpse
English Department
University of Baltimore
Charles Street
at Mt. Royal Avenue
Baltimore, MD 21201

•

AUNT PETE

It was during the First World War and I was six years old. A tradition of two years' standing had it that whenever relatives or friends of the family came to visit, I was asked to read them something I had written. Ordinarily I acquiesced with enthusiasm. There was one woman, however, an "old college chum" of my mother's, for whom I was not eager to read anything, because the first time I had done so she had turned to my mother and remarked: "That boy needs glasses."

With that one sentence she established herself as a definite menace. I had just begun attending school, and the last thing I wanted was to be saddled with a pair of glasses. (Apparently I didn't need them, for I managed to continue without them for another thirty-five years, at which time it became difficult to decipher the print in the telephone book.) Nevertheless, the woman, whose name was Peters, and whom I was enjoined to call "Aunt Pete," continued to request a reading whenever she came to see us, and I was not always able to escape. I knew that her reactions would never have anything to do with what I had read to her, but only with the way I looked or sounded during the reading. "Speak up, speak up," she'd say, or "Sit straight in your chair. You're all doubled over."

Once when Aunt Pete came, I had just finished writing a story called *The Lady of Peace*, and I had to read it to her. The text ran thus:

"One day when the Lady of Peace was out walking, she met a cat.

'My word! What a pretty cat,' she said.

The cat looked at her kind of queer, then said: 'Go home.'

'The idea! I won't,' said the Lady of Peace.

'Hike it home,' said the cat.

'I won't!' cried the Lady of Peace, stomping her foot.

'If you don't go home, I'll make you,' said the cat, throwing some stones.

'After all, I don't think it's such a pretty cat,' said the Lady of Peace, and went home."

Aunt Pete waited, then said: "Is that all?"

"Yes."

"Cats can't throw stones," she began helpfully.

I stood up. "Most cats don't talk, either. But this one could talk *and* throw stones."

Aunt Pete turned to my mother. "You know, that kid should be out more in the open air."

—Paul Bowles

Content Style Consequence

The Black Sheep Review

I wish there was a regional acoustic-music magazine like this one from New England in my part of the world. While some of the feature articles seem insubstantially related to the subject at hand (folk food?), the writing is without the precious tone that hardcore folkies often take.

And the odd bits of hard information are great. In the two issues of ***Black Sheep*** *I've seen, there's a concise little essay by Darol Anger, and a two-page workshop on bottleneck guitar by Artie Traum — those guys are swell musicians — and a review of 'Jersey music clubs by Richard Brautigan, who is more conversant with the subject than I would have guessed. This is not to slight the staff writers, who know their stuff, write well, and review some performers who, regardless of their quality, are never going to get a spread in* ***Rolling Stone****.*

One- or two-page "workshops" for various instruments appear to be regularly featured. The ones I've seen deal with fairly specific endeavors (Traum's slide-guitar spread, for instance, boils down to "Here's how to play that Elmore James 'Dust My Broom' lick. Plus a couple other all-purpose ornaments." Not: "In two pages I'll make you a bottleneck star!").

Even the ads are sources of good stuff — they tend to be from small record distributors and manufacturers of unmainstream instruments, odds & ends, etc.

—James Donnelly

•

Performing a slow sentimental song on a banjo presents a number of problems. First the *timbre* of the banjo is against you. In other words, the instrument produces sharp plunky tones with virtually no *sustain*, while sentimentality requires a smooth (legato) feel with significant sustain. Next, some way must be found to use the fifth string without constantly calling attention to it. . . .

I used a number of devices to come up with an effective arrangement. To start, I made frequent use of *thirds* instead of single tones. Thirds, which consist of a scale note plus another scale note two steps higher or lower, are the building blocks of chords. Assuming that a G major scale is the melody, a series of thirds can be constructed in which a harmony note is a third *above* each melody note (G-B, A-C, B-D, C-E, F#-D, G-E). In this tune, I used mostly thirds of the second kind so that the melody note would rest on top. Using thirds gives a fuller, softer sound than using single tones.

—Ken Perlman

The Black Sheep Review
Kari Estrin, Editor
$10/year (5 issues)
from:
The Black Sheep Review
One Camp Street
Cambridge, MA 02140

•

"New Acoustic Music" is new because this music consists of either original compositions or original adaptations. "Acoustic" because, for the most part, the music is played on non-electric instruments (except for the exceptions, which we blithely accept and enjoy).

NAM is just the communications signal generated by all those folk musicians who have played traditional music for years, who dabbled in rock but stopped (maybe) playing electric music, and who got involved with any segment of the Bluegrassswingpopjazzbluescountrygospelrootsrockreggae world and/or any segment of the "world" music: EuroClassicalIrishBolivianKlezmerBretonMidEasternAfricanIndian traditions. If those musicians who, because of the vast new power of modern communications, were exposed to world culture and who, through years of working and playing with similarly crazed fellow musicians, are now reacting to that tremendous input by creating music which embodies all the tones and feelings appropriate to all they've absorbed.

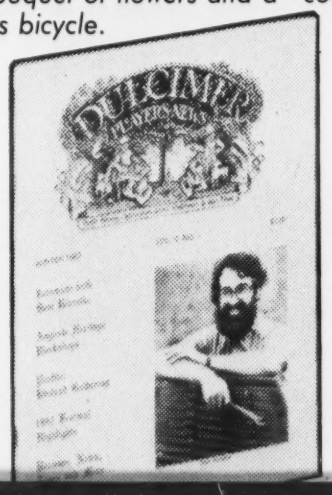
—Darol Anger

Content Style Consequence

Dulcimer Players News

I'm still trying to figure out the best way to learn to play my Appalachian dulcimer; what keeps me working at it is this quarterly newsletter full of tunes (tabulated for nonmusicians, even), books and record reviews, articles, interviews, and ads for little dulcimer-making cottages in the Ozarks. Both mountain (Appalachian) and hammered dulcimer views are met, although the two are played (and sound) quite differently. Best features are the calendar, which lists every dulcimer-based folk music festival in the country, and the illustrations showing such delights as a fellow going to his sweetie's house with a bouquet of flowers and a "courting" dulcimer, riding his bicycle.

—Karen Missavage



Dulcimer Players News
Madeline MacNeil, Editor
$10/year (4 issues)
from:
Dulcimer Players News
P.O. Box 2164
Winchester, VA 22601

Lynn McSpadden of The Dulcimer Shoppe in Mountain View, AR devised a heated bending form which bends the sides very quickly by using a two-sided, heated press. The process requires less than ten minutes, the actual time being determined by how hot the sides of the press are.

French's Basic Catalogue of Plays

The three theater societies to which I belong produce eight shows a year. We deal with French's continually and all too often on an emergency basis. Their people are everything you hope people in the theater industry will be. They are courteous, intelligent, informative, and most of all, they treat you as an individual. All this in spite of the fact that they dominate a segment of the business. On one memorable occasion, my husband and I gave them a matter of days to ship hundreds of dollars worth of music to us. This they did immediately. They then kept up with UPS and with us as UPS temporarily lost the shipment; at which time French's sent us a duplicate in a matter of hours. The second shipment was acquired as we waylaid the UPS man in the completion of his appointed rounds. We boarded our plane for the Middle East two hours later, blessing French's all the way.

Their catalogue indexes their vast selection of plays by author and by title. It then goes on to classify them by number of characters, by royalty costs, by ethnic group interest, and by about a dozen other factors. If you are looking for a budget one-act play of interest to Chinese women . . . this is the place! They seem to anticipate and answer all your questions about the plays and the ordering procedure before you ask. They also offer lots of peripherals, such as preprinted posters. A must for any theater society. —*Mary Anne Strathearn*

•

THE ZOMBIE. (All Groups.) Thriller. Tim Kelly. 4 m., 4 f.

French's Basic Catalogue of Plays

free from:
Samuel French, Inc.
25 West 45th Street
New York, NY 10036

(plus 2 optional non-speaking walk-ons). Int. First there was *Frankenstein* and then *Dracula*. Now the most terrifying horror play of modern-time — *The Zombie*. This is a fantastic comedy-thriller in a weird and sinister setting — the Okefenokee Swamp of northern Florida where voodoo practices are accepted. In a decayed mansion dripping with cobwebs and mystery, a former carnival hypnotist calling himself Baron Samedi and a crooked sheriff have developed an "unusual" business. They turn illegal immigrants, petty criminals and intruders into zombies and lease them out as farm laborers. Profits and success aren't enough, however. The hypnotist wants revenge against all those who have wronged him in the past. Soon the old house is shaking with thrills, shivering shocks, and a startling climax. For the young television producer and his two girl friends who stumble onto the grim proceedings, it's a night to remember — especially when they encounter "The Walking Dead." Despite the goosebumps, the chiller is loaded with genuine comedy and keeps its audience in a state of taut excitement and laughter. The roles are fun to play and the gripping production needs are quite simple.

$3.00. (Royalty, $25.) (#28010)

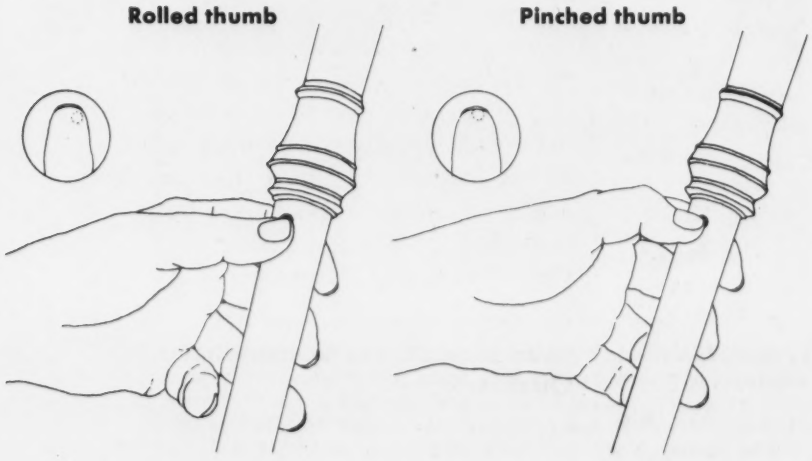
The Recorder Book

A plastic recorder is about the cheapest possible introduction to serious ensemble music, and this is the perfect how-to book for recorder. It includes a lesson for the complete beginner, fingerings and possible problems with every note in the range carefully catalogued, a little history, how to practice, how to play in ensembles, how to choose a recorder, Baroque ornamentation, and an extensive bibliography. Wollitz is an interesting writer and a splendid teacher, and the chapters on practice, ensemble playing, and ornamentation are interesting even to other instrumentalists. —*Karl Graves*

•

Alternate fingerings are available in great abundance on the recorder. Almost every note can be fingered in more than one way. Some notes have three or even more possible fingerings. These alternates are useful in several ways. They can be used to correct intonation if the regular fingering is out of tune. They can be used to achieve dynamic effects, a sharp alternate blown softly for a piano, or a flat alternate blown harder for a forte. They can also be used for their difference in timbre from the normal fingering. Their greatest usefulness, however, is in easing moments of technical duress. . . .

Rolled thumb **Pinched thumb**



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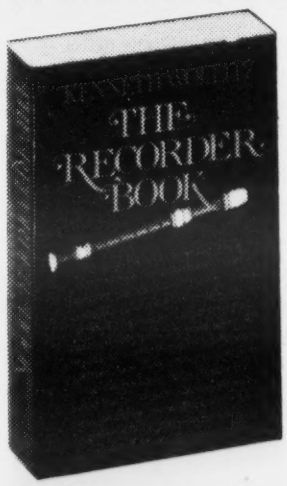
How far to open the thumbhole varies from recorder to recorder, and quite often from note to note on the same recorder. Also the thumb has to be extremely agile in moving from cracked to closed to open position as the recorder skips back and forth between the upper and bottom registers. All of this leads us to one conclusion: we want the simplest and most economical movement from closed to cracked thumb that we can find.

There are two methods, *pinching* and *rolling*. *Pinching* involves pressing the thumbnail against the thumbhole. *Rolling* involves swiveling the thumb slightly to uncover the hole. Pinching is the recognized method. It is used by most people, taught by most teachers, described in most method books, and historically correct. Most amateurs do it incorrectly. Rolling is practiced by a renegade minority, many of whom are former (or present) clarinetists who are familiar with thumb-rolling from that instrument. Pinching is defended as being easier to control exactly, and some feel that the hard edge of the nail has a better acoustical effect than the softer flesh of the rolled thumb. We thumb-rollers are not aware of the difficulties imputed to our method, and we prefer it because the movement is simpler. However, the pinched thumb, when done properly, is a very simple movement too; so I think it's all in what you are used to. Either method is satisfactory. I actually use both, switching to a pinched thumb in treacherous registers on the soprano and tenor, specifically, from the second octave G on up.

The Recorder Book
Kenneth Wollitz
1982; 259 pp.
$9.95
postpaid from:
Alfred A. Knopf, Inc.
400 Hahn Road
Westminster, MD 21157
or Whole Earth Access



BACKSCATTER

Echoes from readers back to CoEvolution Quarterly

Why young urban professionals are rare

It is disturbing to see your stamp of approval on Paul Colinvaux's theory of history ("Fitness, Niche and Clutch," Spring '84 **CQ**). The biological concepts on which Dr. Colinvaux bases his analysis, while sound enough in their original context, have been so distorted in the process of being applied to human society as to make all the subsequent extrapolations dangerously misleading.

In the ecological sense, niche breadth refers to a species' range of environmental tolerance and its versatility in meeting the requirements of evolutionary survival. Most cosmopolitan weeds, for instance, are said to have broad niches, in that they can successfully propagate under a wide range of ecological conditions. Similarly, generalist animals such as raccoons or skunks have broad niches, in that they can feed on a wide variety of life forms — grubs, plants, or even carrion — and thrive in habitat ranging from woodland to near desert.

To remain faithful to this definition, it would seem more logical to attribute "broad niche" characteristics to peasants or hunter-gatherers — "generalists" who provide virtually all their own services and know how to obtain food from a wide variety of ecological zones — than to Western professionals, whose highly specialized training gives them in fact a precariously narrow basis for resource procurement. Yet Dr. Colinvaux chooses to define breadth in human niche on the basis of *options* (*before* specialization) and of *volume of resources commanded*. Since the options in question are themselves attained through access to education, which for the majority of the world's people is in turn a function of the "volume of resources" at their disposal, it is this latter that emerges as the crux of the definition. In fact, what Dr. Colinvaux is describing here is analogous not to niche breadth but to trophic level. It is large predators such as the polar bear who are like the "educated classes" in his scheme: both have access to a large volume of high quality resources, but importantly, both can only get those resources from a very specialized role in a very special environment. Similarly, as the author himself points out, big-income people must be rare for the same reason big fierce animals are rare: both by definition sit at the top of a living pyramid, the concentrated fruits of whose production they are thus in a position to reap.

But with the terminology adjusted, a crucial difference between the realms being compared here becomes apparent. The polar bear's position at the top of its hierarchy is a function of biology. The Brahmin's is a function of power. Human classes are not separately breeding subpopulations in any biologically meaningful sense; the separation between them, such as it is, is maintained ultimately by an imbalance of power. Dr. Colinvaux shows an uncanny ability to put his finger on the consequences of this without ever acknowledging that anything more evil than the fact of human learning could be the cause. For instance, in his own words, the only means by which to create more "broad niches" are technological development, trade, colonization, war, and oppression. Even the two potentially peaceable alternatives given here, development and trade, would have to be carried out under unequal terms to generate truly broad niches as he has defined them. They are all, in other words, manifestations of power.

PHIL FRANK

This slippage between a biological terminology and a social subject matter gives rise to two major problems. The first is that the argument simply does not fit the facts. It is just not true that all societies which have developed agriculture have concomitantly developed anything like the "ranked hierarchy of niches" he describes. In all the world, only India perfectly fits this model; and in numerous small-scale agricultural societies, membership in the ruling "stratum" is actually nonhereditary. For another example, the work by Thomas Smith on infanticide in Tokugawa, Japan — a work which Dr. Colinvaux cites approvingly — in fact undermines his own central tenet that, except in cases of extreme poverty, "family size should be an inverse function of niche size." Smith argues from his data that the opposite is true: poorer families consistently had fewer children than their better-off neighbors, at the same time that the general standard of living is believed to have improved. Similar purely empirical fallacies abound. For more examples, the reader may refer to any of the numerous reviews by historians and scientists of the author's earlier work along these lines (**The Fates of Nations**).

Yet the empirical problems here, rife though they may be, are not as damaging as the moral ones. The overt statements are bald. Dr. Colinvaux tells us that infanticide is "neater" than other forms of family limitation available to pre-industrial peoples; that the existence of an outcaste class is "necessary to the preservation of civilization" ("unless, of course, the breeding strategy is changed" — ??); and that human ingenuity should be greatest in high-caste populations "because in these the needs are greatest." But it is the implications that are most insidious. We are told that a "broad niche" adult's difficulty in adjusting to a "narrow niche" proves that "a niche once learned is very largely fixed" — as if the "narrow niche" poor were equally content with their original position. Further, from this it is deduced that caste systems are "self-perpetuating" — as if indoctrination and force were not used to keep the castes in their place. Most of all, throughout the piece, we are given nothing but self-interested competition as our paradigm for human social life.

This is not a true model of social life. If anything, it is a formula for social disintegration. For Dr. Colinvaux has failed to mention that, as human beings, our very self-interests have an inevitable social character. He has not mentioned that social claims for reciprocity have always been invoked to restrain individual competition, nor that the fragile structures for securing such reciprocity are being alarmingly undermined by the increasing imbalance of wealth and power in the world. And he apparently is not aware that work such as his — especially coming from an academic's pen — can so easily be turned to serve as justification for the whole deadly process.

Dr. Colinvaux may or may not know as much. But **CoEvolution Quarterly**?

Karen Wigen Lewis
Oakland, California

Bullyboy Qadhafi

Jessye Piper's amazing apology for Colonel Qadhafi ("Faces of the Enemy," Spring '84 **CQ**) deserves some response. The kind of bland generalities she uses to explain away some of the man's more obnoxious habits could just as well have been used to justify tolerating Stalin, Hitler, Mao, or any other of the bully boys of history. Why should the man who has publicly lied about so many things, the latest being the cowardly and deranged murder of a policewoman in London, be given the benefit of every doubt?

Here is a man who is openly racist, overtly hostile to every democratic nation on earth, offers succor to Idi Amin, condones and promotes anti-civilian terrorism; yet we are asked not to dismiss him merely because "his values clash with ours." Isn't it about time we questioned what values Qadhafi and his kind observe? A politician's religion or upbringing should be no expiation for the oppression of women and gays, wholesale arrests and executions without pretense of fairness, and calls for the annihilation of the Jewish "race."

I have not seen any of the critics eager to criticize our own churches take aim at the religious practices of the Third World. Is it unfashionable to suggest that many of the Third World's problems are rooted in their indigenous reactionary and anti-individual heritage?

Certainly there's good reason to look at the world from an angle different from President Reagan's. But it is saddening to see the loyal opposition reduced to such a gutless and confused level that it cannot present and defend its own values. Ms. Piper's astonishing, and patently wrong, justification for Libya's lack of a free press is a case in point. (If America can "afford" a free press only because our society is so stagnant, what lessons must we be able to learn from yeasty Libya, which has had the same dictator for over 14 years?)

I guess I'm just narrow-minded and ethnocentric, but the only challenge Qadhafi presents to this Western mind is how best to be rid of him.

Philip E. Bowles
San Francisco, California

Whole Qadhafi

. . . I would like to commend you for your Ghaddafi article, which was the most balanced, reasonable, and multifaceted to date, about a man which many Libyans, and true Muslims as well, feel has gone over the edge, making unacceptable claims for himself about his "prophetic" role to his people. But your article still presented more of the whole man than ever before encountered in an article of that type. . . .

SPAIN RODRIGUEZ

Abd al-Hayy Moore
Santa Barbara, California

Garrett Hardin replies

I am pleased to note that my article ("Sentiment, Guilt and Reason in the Management of Wild Herds," Winter '83 **CQ**) stirred up some arguments. We need widespread public concern if we are to do better by our mute animal friends. Let me respond to some of the points raised (Backscatter, Spring '84 **CQ**).

Ina and Mason Phelps suggest that periodic "crashes" of a wild population might "eventually lead to lower fecundity of the deer herd as an adaptation to the lack of predators." This touches on an old puzzle in biology: How can sterility (or relative sterility) be selected for?

Granted, it is to the interest of the herd to be less fecund; but herd members that have more offspring will leave more descendants than ones that have fewer. The Phelpses say that "it is conceivable that does which do not have fawns every year would be more likely to survive a hard winter." Not so, I think. The physiological strain of fawnbirth is trivial and completely recovered from over the long summer that intervenes between birth and winter. As for the food freed by a doe that skips a year's breeding, this food is commonized over the whole herd. Sterile females benefit from the reproductive restraint — but so do fecund ones.

If deer were capable of evolving a system of private property in food, then selection could favor relative sterility (limited fecundity). In the absence of such an economic system the tragedy of the commons insures that selection will operate in favor of relatively high fecundity. Predators act as a sort of "Deus ex machina" to save the herd from its own suicidal tendencies.

I cannot go along with the Phelps's casual acceptance of the population crash as a desirable means of population control, for two reasons. Going beyond the word *crash*, what reality do we find? First, that deaths in a crash are from prolonged starvation and from malnutrition-induced diseases. Surely such deaths are less to be desired than a relatively sudden death from a .30 - .30 bullet or from the jaws of a wolf pack?

In addition, the last stages of overpopulation wreak devastation on the plants that support the deer. Following this the recovery of the habitat is slow, and may not occur at all. By contrast, when wild predators (or human hunters) keep the population well below the carrying capacity of the environment at all times, the deers' environmental amenities remain unimpaired.

In response to the final printed sentence of the Phelps's letter I can only echo the concluding sentence of Wittgenstein's "Tractatus Logico-Philosophicus": "Wovon Mann nicht sprechen kann, daruber muss Mann schweigen."

Turning now to Judith Hunter's letter, let me say that I am grateful to her for calling my attention to the passage that bespeaks Albert Schweitzer's recognition that the ideal of compassion is sometimes better served by killing animals than by preserving them. Had I known of this passage I would have qualified my remarks on the significance of the medical missionary in my article on the management of wild herds.

Hunter's letter raises an interesting point. If I were writing a life of Schweitzer, I would be under compulsion to report and carefully weigh his various statements, no matter how inconsistent. On the other hand, when we are concerned with Schweitzer's influence on public opinion, Schweitzer-the-symbol is more important than Schweitzer-the-total-man. As a symbol there is little doubt that Schweitzer stands for nonkilling even when this produces more suffering in the long run. Moreover, although he recognized the desirability of killing the maimed individual in the interest of minimizing individual suffering, he did not (so far as I know) realize that the fantastic ability to reproduce exhibited by all animals and plants implies the necessity of a matching rate of "undeserved" death, if suffering is to be minimized in populations of living beings, both now and in days to come.

Or did he? I stand willing to be corrected.

Garrett Hardin
Santa Barbara, California

Violin secrets

Being a violinmaker by profession, I cannot remain silent regarding the violinmaking books reviewed on page 16 of issue 40. It should be known that none of the three books reviewed are taken seriously by professional makers. The Heron-Allen book is of some interest, being the first attempt at writing a serious violinmaker's manual in English. The book contains occasional hard information, but Mr. Heron-Allen was hindered by the fact that he only completed two violins in his lifetime.

Mr. Wake, judging from the content of his books, works more in the spirit of the hobbyist than of the professional, and his books are written for that audience. Anyone serious about learning violinmaking as a professional will have to look elsewhere.

There is, in fact, precious little in the way of good texts on violinmaking and restoration. Having the right teacher at the right time is the best way to learn the proper techniques. Most of the useful information has never been written down.

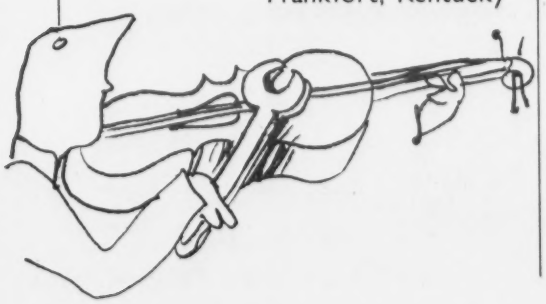
Books that *are* of use include **The Secrets of Stradivari** by Simone Sacconi, whose students now form the first recognizable American school of violinmaking. This book contains many valuable stylistic points that must be in the repertoire of a maker if he is to be considered professional — hence "secrets."

Two other important books contain primarily photographs. They are **The Iconography of Antonio Stradivari** by Herbert Goodkind, and **Master Italian Violinmakers** by Walter Hamma. The pictures in these books form the basic vocabulary of style for the maker. In learning the violinmaking business, a great deal of time must be spent *looking* at actual instruments or at photographs of them. Both of these books are very expensive, but once you've spent the money they become invaluable.

As far as I know, the three books I've mentioned are only available through wholesalers of instruments and supplies, and certain mail-order companies.

John P. Moroz
Frankfort, Kentucky

LARRY GONICK



Student responsibilities

Amazing what surfaced in your articles on the philandering of Muktananda and Richard Baker (Winter '83 **CQ**) and the responding letters. Everyone blamed the men for seducing — for whatever complex of reasons — the women. (The reverse situation, the women seducing the men, was not addressed.) I've had the unavoidable thought: Don't these women share any of the responsibility? Why are they seen as so totally defenseless, vulnerable, unprotected? We're back in the Victorian age. The paradigm implicit on your pages is this: Men = the pitfalls of power, wisdom, domination = blame; Women = the pitfalls of weakness, ignorance, helplessness = innocence. It's an insult to automatically excuse the women on the basis of their unproven faults. This strikes me as shoddy, archaic thinking, unexpected in your magazine.

Not all disciples are so committed to their teachers that they yield everything, so let's say that those who yielded sexually to the men in question were those who were the most intensely committed to them, who wanted to gain the most. Apparently none of them loved these teachers, or absorbed enough of their wisdom, to the the point of knowing how to hold them at arm's length. We have the ironic situation where the most devoted students are farther from the practice of wisdom than those who have not surrendered all as they were asked in order to achieve it. The concept of surrender has been misused, and certainly misunderstood. I'd say these men were poor teachers. Maybe we need to learn that a realized being is one thing, an effective teacher quite another.

Even worse, I'm willing to bet that at least some of these women were, whether consciously or not, participating in that old scenario, advancing up the ladder to prestige and privilege via handing over sexual favors.

Laura Cohen
Albany, New York

[For what it's worth, a couple of the philandering teachers in Susan Murcott's unpublished list are homosexual, their "victims" male. —Stewart Brand]

Cancel my subscription

I'm writing regarding the article "Politics of Religion at Muktananda's Ashram" [Winter '83 **CQ**]. I have been a satisfied subscriber/supporter of **CoEvolution** for a few years now, and was thus shocked by the low level of journalism in this article. Innuendos and statements of disaffected people do not make for a true picture when they are presented to try to prove a point rather than reveal the truth in a balanced way. The article was clearly a classless display, and really does not dignify a lengthy response. The truth is that Swami Muktananda was a great living saint and his ashram is a vibrant memorial to his greatness. Cheap-shot articles are a dime a dozen and I'm truly sorry to have witnessed your indulgence.

Please cancel my subscription to **CoEvolution** immediately.

Robert Burgess
Honolulu, Hawaii

Summing up

Since **CQ** *published "The Secret Life of Swami Muktananda" in the Winter 1983 issue, we have received a great deal of mail, both pro and con. SYDA followers in particular took exception to the article, which is hardly surprising. In addition to the cancellation letter reprinted above, we received one particularly strong expression of outrage: a longtime* **CQ** *reader and follower of Muktananda sent back his entire collection of 41 issues and bid us adieu. Because of the heartfelt intensity of this gesture, I felt called upon to reply at some length with a few of my own observations. An edited version of those observations follows. Perhaps they will answer questions that other readers may have regarding our perspective on the article.*

—Jay Kinney

1) When **CQ** was first considering the article, I had questions about it and its author. After much discussion with William Rodarmor I was convinced that he was writing sincerely and honestly in the piece.
I found no indication of his being hired or manipulated by others in his writing of the article. In his original manuscript he scrupulously indicated sources for every quote, statement, or allegation.

2) In calling the various sources I became convinced that they were telling the truth, at least as they saw it — especially after my conversation with one of the women who had had sex with Swami Muktananda. To the degree that one can judge from phone conversations (and listening to tapes) I was convinced that the incident had, indeed, occurred and had emotionally torn her up. With a charge like hers — where no one else had been present — much rides on what credence one gives to her "testimony." Rodarmor interviewed her and others at far greater length

and was equally convinced. Things like this are background details that are often difficult to convey in print.

3) Attributing the threats and violence to "overzealous and aggressive followers" as some have done does not diminish the problem. There were enough witnesses to these incidents that their authenticity did not seem in question. Even if one disengages Swami Muktananda from involvement and, instead, sees him as a salutory restraining influence on some aggressive followers, the very fact that he is no longer around to play that role increases the possibility of future incidents.

4) There were aspects of the article's style and the accompanying illustrations that were not to my personal taste. Some of these aspects — the judgmental ones, in particular — have caused the most emotional reactions among followers of Muktananda. I think this is unfortunate to the degree that it deflects attention from the real point of the article: that abuses of followers and harassment of ex-followers developed in the last few years of Swami Muktananda's life and must be taken into consideration in any assessment of Baba and SYDA. The article has been criticized by followers of Baba for not containing more positive quotes from current devotees to balance out all the critical statements in the article. If so, should the authors of the much more common articles praising Swami Muktananda or SYDA be equally obliged to give equal space in such articles to dissenting and critical views? Calls for balance cut both ways, and given the overwhelming predominance of ecstatically positive articles in the "new age" press, I'm not overly inclined to wring my hands when **CQ** prints one article giving voice to dissenting critics.

5) Finally, when all is said and done, I have not received one letter that has convincingly challenged the factuality of the events described in the article. We *have* gotten numerous ad hominem attacks on the author and/or major sources as well as various statements of disbelief. Whether devotees choose to believe the article or not is their business. Perhaps the value received from their own relationships with Baba far outweighs the significance of the ex-followers' charges. However, I think it is important that the charges at least be made public so that devotees and others take them into consideration when evaluating SYDA.

I can well remember the howls of outrage with which Peoples Temple members bombarded local media when relatively mild criticisms of the group first appeared in the press. Temple members characterized these criticisms as political attacks, lies, vulgar innuendoes, etc. Certainly many Temple members believed them to be such and later went loyally to their deaths firm in their beliefs. While I am not drawing a direct parallel between Reverend Jones and Swami Muktananda and their respective groups, I do feel that recent incidents of leader/follower abuse should serve as encouragement for people to seriously examine reports of intimidation, breach of trust, sexual molestation, etc. that surface. I am not interested in encouraging cynicism — as my introduction to the article makes clear. I am certain, however, that it is dangerous to abandon one's own critical faculties out of love and admiration for one's guru or teacher.

Jay Kinney

The lobster trap

JAMES DONNELLY

Regarding the kind of total allegiance to a guru that characterizes SYDA and similar groups, a former follower of Muktananda who requested anonymity had this to say:

What makes Siddha Yoga so hard to get out of is that it's like a lobster trap of the mind: easy to blunder into if you're not careful, but almost impossible to escape from without help. The guru's greatest crime is not his hypocrisy, not the fact that he impersonates God, but the fact that he impersonates *you*. Of course you can differ with God's judgment. But once you accept the premise that the guru is really you, your own True Self, and that what you think is you is not you but only a vicious impostor (ego), then you cannot differ with your own Self. All faith-thoughts come from your true inner Self, all doubt-thoughts come from ego, all good things that happen to you are Guru's Grace, all bad things that happen to you are your own karma: you're in the lobster trap.

LARRY GONICK

Piano secrets

In his review of **Piano Servicing, Tuning & Rebuilding** (Winter '83 **CQ**), Keith M. Wulff pointed out the book "is missing . . . hints on where to find parts." The problem is the suppliers are wholesalers who generally don't want to deal with the public. But if you write to the following sources, stating you're a piano tuner-technician just starting out and would like a catalog and/or price list, you should be able to break through the wholesale barrier.

Tools, Parts & General Supplies:

Ford Piano Supply Co.,
4898 Broadway, NY, NY 10034

Schaff Piano Supply Co.,
451 Oakwood Road,
Lake Zurich, IL 60047

Tuners Supply Co., 94 Wheatland Street, Somerville, MA 02154, or 190 South Murphy Avenue, Sunnyvale, CA 94086

Pacific Piano Supply Co., P.O. Box 9412, North Hollywood, CA 91609

American Piano Supply Co., Box 1055, Clifton, NJ 07014

Superior Imports Ltd., 2152 West Washington Boulevard, Los Angeles, CA 90018

Strings:

The Mapes Piano String Co.,
Box 112, Elizabethton, TN 37643

(Many of the above suppliers carry strings but I find Mapes to be superior in quality and service.)

Action Parts:

Pratt Read & Co., Ivoryton, CT 06442

Key Recovering:

The Piano Workshop, 3166 West 33rd Street, Cleveland, OH 44109

O.E. Shuler Co., Inc., 149 East Harrison Street, Paragon, IN 46166

John W. Myers Piano Co.,
1314 East Court Street,
Dyersburg, TN 38024

Hammers:

Ronsen Piano Hammer Co., P.O. Box 188, Boiceville, NY 12412

"B. Cristofori"

Holocausts 2 and 3

Responding to Dick Fugett's "The Washington Connection" (Spring '84 **CQ**), much to my ethnic surprise I was stunned when I realized that he fell victim to the same issue of omitted information he raises in his review of Chomsky and Herman's book, **The Washington Connection and Third World Fascism**. To quote: "Chomsky's review of the 1965 massacre in Indonesia is an example (of investment community involvement). By numbers it was the second largest holocaust in this century, having taken the lives of somewhere between 500,000 and a million people, yet few have ever heard of it."

Fugett must assume that the Nazi holocaust inflicted on the Jews was the largest genocide attempt in this century (approximately six million Jews killed is the usual estimate). However, the slaughter of the Indonesians is not the second largest as he claims, but the third largest (as far as I know). The second largest holocaust of this century took place in 1915 in Turkey, where the Turkish military, backed by its government and assisted by their German allies in the planning, systematically attempted to perform an act of genocide on the minority Armenians, killing, torturing, mutilating, raping, beating, starving, and burning them. Estimates of the total number of deaths for that year alone (there had been previous attempts to eliminate the Armenians by the Turks) ranged between one and one-and-a-half million, while some estimates are even higher.

To this day the Turkish government not only has denied the existence of a plan to eliminate all Armenians, it firmly insists that the genocide never occurred. Although I was born in this country and have lived here all my life, I grew up hearing the most unbelievable stories of torture, killings, and madness. Those feelings are still harbored in the minds of the survivors — my parents, relatives, and other Armenians, still giving oral histories and backed by historical documents available to all. At the time the Western nations protested to the Turkish government, but because of international power politics at the time, did nothing further when the Turks ignored their pleas.

Since I was sensitive to that monumental horror, and since by a quirk of geography I had grown up with Jews in Detroit and knew of their plight as well, I did take note of the Indonesian massacre of 1965. Fugett is correct in citing the lack of media coverage, but there was enough tucked away in the back of the **New York Times** to identify it. When I discuss the topic of oppression in my classes here at the School of Social Work at San Diego State University, I never fail to mention Indonesia and how it was ignored by the West (and the U.S.). I also wonder about other holocausts we haven't heard about.

I am running out to purchase Chomsky and Herman's book.

James Ajemian
San Diego, California

Herbicides in Nova Scotia

I would like to add some information on Agent Orange/herbicides, as per page 75 of the recent issue.

In September 1983 a judge in Nova Scotia ruled that the spraying of 2,4-D and 2,4,5-T is safe and legal, giving the Nova Scotia Forest industry the go-ahead for this year's spray program. The judge also awarded the company the cost of the suit. This means that the spray opponents will have to pay over $200,000 in industry court costs. Many have had to put up their homes and land, as well as their businesses.

Despite reports that the forest industry has often sprayed waterways, mixed the herbicides at double strength, and violated downwind spraying regulations numerous times, and despite the fact that these chemicals are banned in the U.S. and several Canadian provinces (due to links to cancer, birth defects, miscarriages), the spraying will continue.

While the spray opponents try to gather financial support, especially for an appeal, various other means of expression are being explored. Scott Paper, one of the three multinationals involved in the spraying, has become the target of a North American boycott (Cashmere & Cottonell bathroom tissue, Scott and Viva paper towels, and much more). Scott owns one-eighth of the province of Nova Scotia.

The court ruled that the herbicide spraying did not endanger public health. The Maine branch of Earth First is urging a tourist boycott of Nova Scotia, with letters of intent to be mailed to the tourism department in Halifax. Do we want to vacation in forests sprayed with Agent Orange? Do we take our children there, drink the water, breathe the air?

One of the most affected groups is the Micmac Indians. Chief Ryan Googoo of the Whycocomaghs is one plaintiff who stands to lose his property. He has cautioned that "We're the ones getting sprayed on, not the government, not the lawyers . . . We're 6000 Micmacs in the province. We're not a violent people, but [this] summer, if we have to, we'll make a massive protest."

For information, or to contribute financially:

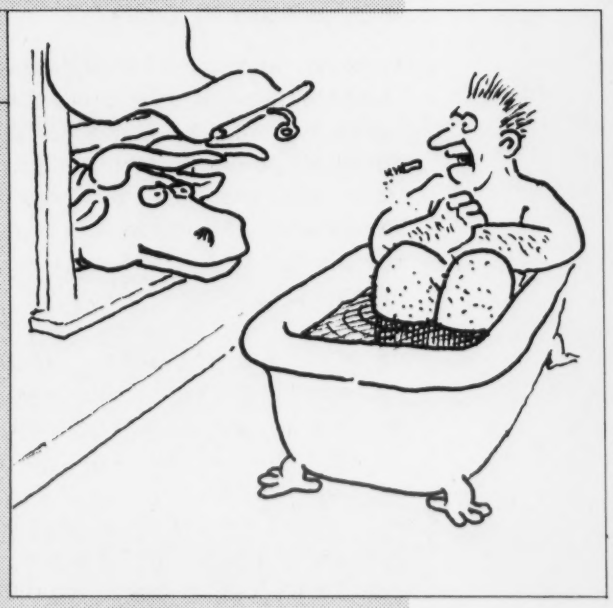
Herbicide Fund Society
c/o Connie Schell
RRI - South Haven
Nova Scotia, Canada BOE 3GO

Gary Lawless
Brunswick, Maine

Stanley Marsh 3 rides again

I am afraid of my cows. I know that one of them hates me, maybe they all hate me and always have. But there is at least one out there who knows that I can be had. I can be knocked down and rolled around and sent crawling off in pain. Has she told the others? I can't tell. But each time I force myself to go among them, each twitch of the ear and stomp of the hoof seems to be telling me that the word is out. I can be had.

Stanley Marsh 3
Amarillo, Texas



JAMES DONNELLY

Surnames and Sex

Ho hum. So here we go again with the great esoteric search for "nonsexist family names." It really amazes me how glaringly such searchers as Anthony Weston (**CQ** 41) and Jeannette Germain (**CQ** 33) overlook the obvious — that the only *truly* nonsexist (and practical!) solution to the problem is to give a kid its mother's surname alone. This is based on a very simple premise, albeit one that is rarely observed in a patriarchal, capitalistic society: Let those who do the work be given the credit.

To claim that both parents play an equal role in the reproductive process is patently absurd. Genetically, yes — but any woman who's ever been pregnant can tell you that for her there's a hell of a lot more involved than simply being a transmitter of chromosomes. It's the mother's body (not the father's) which for nine months harbors and nourishes a potential human being; it's also her body (not his) which is capable of producing food for the *actual* human being *after* birth. And of course she's the one who has labored — note the verb — to bring this new life into the world. Pregnancy, parturition, lactation. . . . Damn straight she's the one who deserves to have her name passed on. And to any father who would insist on receiving equal (or greater) credit for providing half his offspring's chromosomes, let me address the following question: Should an artist sign her painting with someone else's name just because he provided half the paint?

This isn't to deny the importance of *nurturant* fatherhood; a child can of course benefit from the love and

Chris Persig

Readers of Robert Persig's **Zen and the Art of Motorcycle Maintenance** *will remember the author's son Chris vividly, since the motorcycle voyage to the heart of sanity is undertaken in his behalf. This note and word-photograph is by Chris's brother Ted, dealing with Chris' death by mugger knife a couple years ago near the San Francisco Zen Center. The submission was inspired by Sallie Tisdale's "The Sacred and the Dead" in the Spring '84* **CQ** *(as was Ken Kesey's family burial account on p. 4). Robert Persig himself recently wrote an extraordinary piece about Chris' death in* **The New York Times Magazine**, *and it was reprinted in* **New Age Journal** *(May, 1984). The pattern around a life is torn by death, Persig notes, but the pattern goes on. Part of Chris's pattern going on is a brand new half-sister for Ted. Part is the color here.* —*Stewart Brand*

I've never before read something that caused me to stop eating, but the Spring '84 article on autopsies forced me to set down the noodles, until I switched tactics and flipped ahead to something less intense.

My only intimate exposure to a corpse affected me quite strongly — this piece came up recently while "freewriting:" moving pen nonstop. I'd often been using a color, any color, as a starting point and when I began that day, I shrugged and thought, "brown" and immediately Chris's eyes came up. I didn't want to enter that realm but as Natalie says, "Go for the jugular." So I knew that to *not* write about it would block me from anything else. I hope you're not so bored at your submissions desk now.

Ted Pirsig

Brown #1 (color series)

Brown eyes, brown staring eyes, eyes that didn't move, eyes that were open, that stared vacant, death's eyes, the mouth, the slightly opened mouth, the dried blood below the nose and around the mouth, the slight stubble of a beard, a reddish beard that would never need shaving again & really that's all I could think, looking at that stubble & wondering if it still grew but no it must've stopped growing, dead less than 24 hours there in city morgue & everyone so quiet, 3 of us living ones in that room, 2 people I didn't know, that thick glass wall that kept him cold & kept us warm & it was so important for me to be there & I'm crying now as I write this, so important for me to see his body, to make it real, to see my dead brother, to see that it really was him murdered last night, stabbed once — no mistake — really was him, & I'd waited all day at Zen Center & I'd talked with Reb his teacher & finally there we were & it was not like I thought, I wasn't like I thought I'd be; I was so prepared for the horror of that moment, so ready inside that finally when present there was nothing, no feeling, just close observation of the way the eyes were set, the way they stared so blank & I just looked & looked & it burned into my memory & I *wanted* it to burn into my memory & Mom and Dad never came, Mom didn't want to & Dad didn't arrive from England in time & so they both asked me about what he looked like, and I described as best I could the dried blood, the staring eyes, but not the stubble — no — I kept that to myself, I never asked anyone how long stubble will grow when the heart and lungs stop & y'know finally I was bored, which seems strange now as these tears come up hard, so bored that I sat down & closed my eyes & drifted away & y'know these tears are for you & me really not for Chris, I knew that better then, I sometimes know it now but that day I just slept, & finally I heard footsteps & it was two more zen students coming & I awoke, realizing that I'd been off & away & then remembered where I'd gone & it was with Chris & we were in this larger space, this higher space, & I don't know if we spoke but he showed me who & where he was & it was far better, & it seemed as though the wheel kept turning for me & you but it was like he'd stepped off for a little while & I was so damn happy & so I whispered goodbye to the body & left, & then it was time to be with living people, with strangers who knew Chris but spoke of everything *but* Chris & there was I so ecstatic, & finally at dinner I told some folks what it was I'd experienced & they just nodded politely, so I gave up trying to share it but that night in bed I smiled & whispered softly to Chris & then slept so well, & the next day Mom flew in to share tears & pain & sometimes laughter, & you know there is so much you find out about a person when you sort through their stuff, like Chris the MASON SHOE DEALER & he was his only customer & so now no more tears I'm smiling again.

guidance of either parent. But any number of adults — other relatives, friends, teachers — can play a nurturant role in the child's upbringing; and he/she obviously can't be expected to carry all *their* names, right? Biology should indeed determine the name, and biological fatherhood (unlike biological motherhood) simply isn't that impressive. I'm reminded of a joke that was popular back in my high school days: We'd go around asking each other, "Are you Daddy's little squirt?"

Linda Rutherford
Newburyport, Massachusetts

Atrocity or atrociousness?

It's rather disturbing that **CQ** 41 contains no follow-up to "El Chichon & My Friends" from **CQ** 40. No denials, no corrections, no corroborations, nothing.

Considered one way, this is a major story: a natural disaster turned into genocide of the Chol tribe by cold viciousness on the part of the Mexican bureacracy and military, so that thousands of villagers died when their goods were stolen and their evacuation barred.

Considered differently, this is the most half-assed journalism imaginable: a sensational bit of hearsay, offered by some guy in Chicago, passing on what a couple of friends (identified by first names only) from somewhere in the dust "fall-out zone" had told him sometime (evidently not even in writing), and finally plucked off the modemvine by **CQ** and printed with a photo not directly related to the events described, without mention that the survivors' starvation "in the coming months" must have been a prediction for 1982.

Please find someone who can investigate this a little more closely than by simply plugging into a computer network, and give us a further account. I, for one, would like to know whether **CQ** has reported a real atrocity or just done some really atrocious reporting.

Pierce Butler
Natchez, Mississippi

Doctors vs. PAs

Your review of Bates' **Guide to Physical Examination** (**CQ** 41, Spring'84) was a surprise. Bates is indeed the best guide to the demanding art of the physical exam, and might be valuable to anyone who either has aspirations in that direction or wants to evaluate the thoroughness and competence of his or her health practitioner's examinations. However, as a physician, I resent your reviewer's slur on medical training in contrast to the training of physician assistants. I discussed PA *John Benecki* assertion that "MD training may spend one to two weeks" on the physical examination, with several other doctors. All of us remember a first year Anatomy course that demanded 20 to 40 hours a week for a full semester including the complete muscle by muscle, nerve by nerve, organ by organ dissection and understanding of a human body. As students we all regarded this course, the most intense of first year medicine, as an *introduction* to the material covered by Bates. In addition, all of us clearly remember a year long course of four to eight weekly lectures and four hours a week of practical experience examining patients with their permission and understanding during the second year of medical school. The final two years of my medical school experience were an extended seminar of clinical patient care, including thousands of supervised physical examinations, discussions of findings, and alternative diagnoses. And those years were merely an introduction to the demands I met in three subsequent years of residency training, along with every other well trained MD. The physical examination, along with good history taking, is the cornerstone of medicine. I have spent a good part of the last ten years of my life learning how to do a physical exam, I am still learning, and Bates is still helpful in this effort. I consult her book every day. Mr. Benecki's evaluation of her book is correct and maybe even valuable, but his view of medical training needs correction. He may have studied the mechanics of the human body for "four to five months," but I'm not sure that he should be self-congratulatory about it. After ten years of study I'm not sure I can always "find the car's motor." At least I know where not to look. It's never where you expect it to be.

Patrick L. Clary, M.D.
Brooklyn, NY

John Benecki replies:

As Dr. Clary points out, clinical experience and practice following study of Bates is essential. There is a longer formal period for this for physicians than their assistants, but both must sharpen their diagnostic skills continually, whether in formal training or not.

The metaphor using auto mechanics was aimed at **Co-Ev** for reviewing a book on treatment (Lang) before a book on history-taking and physical examination (Bates). Incidentally, I believe that an auto mechanic has great potential for becoming a health care worker given motivation, intelligence and caring — he or she is already familiar with the process of differential diagnosis and systems approach, and is not afraid of getting the hands dirty.

A debate on who studied what more is perhaps useless; neither Dr. Clary nor I cite an exhaustive study of the nation's PA and medical schools. I believe our efforts would be better directed towards more equitable distribution of health care, patient education, and the fostering of compassion in medical education as a complement to intellectual expertise.

Greek dark ages revisited

A professional postscript to Marshall Massey's article ("Carrying Capacity and the Greek Dark Ages," Winter '83 **CQ**) seems in order, not in order to quibble or to assert PhD power — that would be ironic indeed, in view of how, barely a century ago, Academe managed to make itself look foolish and effete by opposing the theories of Heinrich Schliemann, whose researches opened to our knowledge the very issues addressed by Mr. Massey — but rather so that your readers may not be left with the impression that all the authorities and theories cited or put forward by him represent equally well-founded interpretations of the evidence.

The first part of the article introduces two main assumptions. One has something to do with the ecologic changes wrought upon the Greek peninsula by the presence of man. Thus far we are on fairly safe ground; but it must be borne in mind that the *timing* of these changes is a different matter. Undeniably there was serious deforestation activity; but it had been going on for as long as men had been trying to eke an agricultural living out of the rocky and mountainous Greek terrain (that is, from well before 5000 BC) and continued on into classical times (500 BC and later). It began with the low-lying areas — this we know by simple deduction, since if the whole of Greece was once forest, one would have to clear in order to farm — but certainly by classical times all the land in Greece that could be farmed had been cleared, and the highlands were being cut. In some places this resulted in

complete deforestation of the highlands; Plato tells us that in his day (375 BC) Mount Hymettus was bare, whereas he knew of houses a century old whose huge beams were said to have been cut from Hymettus timber. But when I say "some," I mean it. There were plenty of heavy forests left in Greece, in contrast with the situation today, as a reading of descriptions by poets contemporary with Plato will tell you; these were located on the more difficult uplands, of which, as every traveller to Greece knows, most of the land consists[1].

The second assumption in the first part of the article has to do with the so-called Dark Ages. Mr. Massey says that most people have never heard of these; but alas, all too many have. The phrase, as Massey rightly cites Trevor-Roper to say, denotes the period between the rather sudden ending of the Mycenaean period, about 1150 BC, and the beginnings of that period of colonization and economic expansion which led to the classical period, about 800 BC. But the word *dark* must not mislead. The period is dark to us because it failed to build the sort of large and solid monuments on which archaeology depends for information about the past — and this in marked contrast to what had preceded, and to what we know was to follow. But to the average Greek it was not dark at all. Under the rule of the Mycenaean princes, as far as we can tell, about five families had owned all of the land in Greece south of Thessaly, and everyone else was a serf, compelled to bring all his produce into the vast storehouses of those overweening princes, so that the latter could profit from them, trading with them into a vast commercial network stretching from Egypt to Babylon, a network which trafficked in goods from as far away as Britain and Afghanistan; on this trade the princes grew rich and built the strongholds at which archaeology marvels today, while the people got whatever the princes doled them out. Then something happened; the princes lost their power, and the Greeks spread out over the Aegean.

1. Undeniably, absent more advanced agricultural techniques, the Greeks tended periodically to wear out the arable land that there was; but there is no evidence of permanent damage. Given limited arable land, isolated communities did run short of food; that's why there is land-grabbing at *every* stage of Greek history. But there is no proof that the Mycenaeans' *land* went bad; the same land supported the Dorians for centuries.

They took over the islands, Rhodes, even parts of Cyprus; they spread across onto the coast of what is now Turkey, and which had then been till lately part of the mighty Hittite empire. No more would they be serfs of monopolistic kings; they retained their aristocratic leadership, but, as Trevor-Roper goes on to say in a part of his article not quoted by Massey, they lived *with* them, not under them, in a complex form of political symbiosis best likened to a household. The Greek concept of community was born. And the community thrived; until, by 800 BC, the Greeks were ready to expand again, and took over virtually all of the northern Mediterranean and the whole of the Black Sea in the course of the next two centuries.

Is this darkness? Naturally the aristocrats thought so; and they had their lackeys, such as Homer, sing to them of the golden halls and limitless wealth of bygone ages, which they glorified into myths that legitimized themselves and their past. Hesiod, it is true, sings of the hard life of the farmer; but he is at least *able* to sing it, to us, using the alphabet to preserve his song, an alphabet that was the product of these Dark Ages, a direct result of Greek contact with the Phoenicians, perhaps as early as 1000 BC, and involving some very clever and significant Greek innovations — while during the great period of the princes, the only writing had been an abstruse and jealously guarded state property. Besides, Hesiod is right; the Greek farmer led a hard life. But at least his farm was his. Owning farms; planting and defending new settlements in harsh, new places; freedom from the monopolistic, eastern-style princes of a former day — if such be dark ages, then give me deeper darkness.

Mr. Massey thinks that the Dark Ages were precipitated by ecological collapse. But there is no evidence for placing the ecological crisis at the *beginning* of the Dark Ages — to do this, Mr. Massey is forced to suppose, rather boldly in my view, that the poverty of the land of which we hear starting around the *end* of the period (assuming that Hesiod is not just weary with work, nor Homer just vilifying the present in an invidious comparison with his patrons' "glorious past," both of which are actually quite probable[2]) is due to the land's not having built back up yet. But if the land was bad all that time, then why didn't the Greeks begin planting new grain-growing colonies in the tenth century, rather than waiting until the eighth? And there is another, more serious problem. Even if ecological problems did precipitate the collapse of the princely palace system in Greece, what about the simultaneous collapse of the huge Hittite empire to the east, and the Egyptian empire to the south — were there, perhaps, simultaneous ecological crises on the Tigris and the Nile? No; whatever caused the collapse of the Mycenaean princely system, it was probably political and economic in nature (the best current theory is that with the collapse of the two other empires just mentioned, the princes no longer had a trading network to trade in, making the whole palace system meaningless and unprofitable), and the ecological crisis, if there was one, probably came at the *end* of the Dark Ages, and was what in its turn precipitated colonization and expansion over the northern Mediterranean.

The second part of Mr. Massey's article addresses the "partial societal psychosis" manifested in the Greeks' falling away from a world-view associated with the Great Mother and a correlated, "matriarchal, attuned-to-nature society," and into a different world-view, which Mr. Massey correctly and eloquently describes as "concerned not with the proper place of human beings in the natural universe, but rather with relationships among human beings," and as being permeated with a societal sense of guilt, nostalgia, and alienation. This description is unexceptionable — if rather too moderate. It was this new world-view, after all, that fostered such innovations as the conception of mind (or "soul") as separate from body, and in particular the rational mind as different from and superior to the emotions (thus laying humanity open to a bifurcated, guilt-ridden view of the self), and the view of science not as the attempt to understand man's physical, whence moral, place in the universe, but as acquisition of knowledge merely for the sake of the acquisition of knowledge — that is, for the sake of power. It was, in short, the beginning of our neurotic and technologic era. The trouble with Mr. Massey's analysis is, again, the *timing* of this change of world-view. He maintains that the rejection of the Great Mother occurred as a reaction to

2. This point illustrates a difficulty with overly literal interpretation of literary sources. The mythic cultural tradition of a more fruitful golden age does not prove the earth was really once more fruitful. One needs to keep in mind what traditions Hesiod and Homer borrow from — and what axes they are grinding.

the supposed ecological cataclysm of 1200 BC. Without begging the question of the cataclysm anew, one can still see that the evidence is against this description of the timing.

The Great Mother cult was part of a large, agriculturally based symbol set and worldview rising originally out of the Levant (essentially the Near East) and spreading, with the spread of agriculture, westwards into the Aegean basin, and east and south as far as India. But during the third millenium (3000-2000 BC) waves of Semites from the south, and Indo-Europeans from the north, each bringing a patriarchal, nonagricultural sky-god religion and world-view, swept into and settled, in most cases as conquerors, a large proportion of this region. In Greece in particular, the Indo-Europeans were in place by about 2000 BC, and the history of Greek religion from then on is the story of the working out of the rather severe differences between the religious and social world-order of the newcomers and those of the indigenous population (with, just to confuse matters, a certain admixture of Near Eastern influence as well). The Indo-Europeans did not succeed in wiping out the natives' culture as thoroughly as they did their language, but development away from the pristine Great Mother society and religion must have begun immediately, and there is no reason to think that most of the development evidenced to us for the first time with our first surviving literature had not already taken place by the time the Mycenaean princely palaces fell. Our only surviving writing from before that fall, the so-called Linear B tablets, though containing no specifically religious texts (in fact the tablets are nothing but inventory lists), mention, besides "The Lady" (surely the Great Mother), also Zeus and Hera, Hermes, Poseidon, probably Ares, and a number of other divinities as recipients of offerings. The evidence thus suggests that there were already various cults of various figures. One may object that this is not the same thing as the Homeric canon of twelve gods and goddesses — but then, the Homeric canon is a literary device, not at all corresponding to the actual religious situation either in Homer's time or even during the classical period. The local and country cults of pre-Indo-European divinities such as not only the Mother but also Hyakinthos, Adonis, Zagreus, Orpheus, and the Kabeiroi were being celebrated in 500 BC with rituals that went back two or three thousand years; and even the average-Greek-

LARRY GONICK

in-the-street's image of Hermes as a post with a penis guarding his door, or Zeus as a snake haunting his larder, were a far cry from Homer's winged-sandaled messenger or the cloud-gathering hurler of thunderbolts. None of this is to deny that, as Mr. Massey says, the "catholic qualities of the old religion had been irretrievably lost," despite the survival of such cults and beliefs, by the end of the classical period; but, so far as religion goes, the changes caused by the very arrival of the Indo-Europeans are *a priori* (as well as on the basis of the evidence) likely to have been far more severe, over the period 2000-1200 BC, than any associated with the political and social reorganization between the break-up of the princely palace monopolies and the time of Hesiod and Homer (1200-800 BC). Even the fear of the Great Mother evinced in the myth of Artemis and Actaeon, as mentioned by Mr. Massey, is not proof of any *new* attitude; on the contrary, there is every reason to believe that such myths, showing the tremendous power of the Great Mother, especially over men, such as not only the Artemis and Actaeon story but the myths of Aphrodite and Anchises (she seduced him and then blinded him — a little castration symbolism, anyone?) and that of Cybele and Attis (where the castration is not even symbolic) — that these myths are very old indeed, going back to that time before the coming of the Indo-Europeans, when, as Robert Graves tells us (and he is as radical a proponent of these Great Mother, matriarchy theories as anyone can be), "the Queen chose an annual lover from her entourage of young men, for sacrifice at mid-winter. . . . ; his sprinkled blood served to fructify trees, crops, and flocks, and his flesh was . . . eaten raw by the Queen's fellow-nymphs." So it wasn't all wine and roses for the men-folk, you see, even in those golden days when the Great Mother's power ruled unadulterated.

Yes, something was irretrievably lost by the time of that classical age that set the tone and ideals for our own; but it was not lost in any one fell swoop, and even if it was, the end of the Mycenaean age seems the wrong time to look, and the ecosystem the wrong place. The forces that shaped the societal mind over the course of Greek history were political and economic as much as, perhaps more than, environmental — indeed, next to the political, social, and economic changes, the Greek environment seems to have remained fairly constant. And if you want a place and time to blame, one decisive moment when the Greeks stepped irrevocably out of the mythic world and into ours, look at the difference between the history of Herodotus, writing in 440 BC or so, and that of Thucydides, writing 40 years later — or, similarly, between a tragedy of Sophocles and one of Euripides. To Herodotus, at least, history is still a vast panorama of moral truth, guided by divinity and so in tune with the ultimate universe, in keeping with a world-view visible as early as Greek literature goes, and no doubt stretching back well beyond that; but Thucydides is the Machiavelli of the ancient world. To Sophocles, the story of Electra is one of humanity faced with the Fates and the rules of divine and human society; to Euripides, it is the story of two very bloodthirsty, angry children willing to trample every law of man and god for the pleasure of revenge. Perhaps not coincidentally, the lifetimes of those men *were* the culmination of an environmental change: they lived in a city called Athens, where subsistence farming, and indeed manual labor generally, had dwindled to near extinction — importing had replaced the one, slavery ("machines") the other. I suspect that if one is going to study mankind's relationship to the environment as a factor in the development and change of his world-view, *this* is the time and place to look.

Citation of authorities is a dangerous game, since one man's authority is another man's nut-case. Nevertheless, on points that I have raised, the following are good, standard texts for pursuing the issues:
Emily Vermeule, *Greece in the Bronze Age*, University of Chicago 1972; Joseph Campbell, *The Masks of God: Occidental Mythology*, Penguin 1976; Martin Nilsson, *The Mycenaean Origin of Greek Mythology*, University of California 1932; Robert Graves, *The Greek Myths*, Penguin 1955; Jean-Pierre Vernant, *The Origins of Greek Thought*, Cornell 1982; and the Great Mother of us all, Jane Harrison, *Prolegomena to the Study of Greek Religion*, Cambridge 1922.

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ATTRACTIVE 38-YEAR-OLD MALE, Horselogger, homesteader, seeking correspondence with spirited, attractive female of like interests. Send personal data and photo to: Singletree Horselogging, 3724 No. Co. Rd. 13, Ft. Collins, CO 80524.

BE YOU LONG AND SHAGGY, short and sweet, write me letters. I'll write you some. Glenn James, RR#1, Carleton Place, Ontario K7C-3P1.

COEVOLUTION Quarterly

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Mailing Services
Mailing Management, San Francisco
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Printing
Warren's Waller Press, San Francisco
A.L. Lemos Company, San Francisco (bindery)
Marinstat, Mill Valley (stats and halftones)
Synthex Press, San Francisco (mail order form)

CoEvolution Quarterly
January, February, March 1984

Income	
Subscriptions & Renewals	95,684
Direct Distribution	18,341
Back Issues	2,976
Mailing List	4,917
Unclassified Ads	1,939
Total Income	**123,857**
Expenses	
Point Corporate	12,926
Machinery & Equipment	0
Furniture & Fixtures	0
Freight (Distribution)	847
Printing (Magazine)	26,962
Mailing List	753
Sub. Promo. & Fulfillment	18,052
Writers & Contributors	6,135
Salary — Editorial	12,411
Salary — Research	2,475
Salary — Production	17,363
Salary — Office	7,299
Salary — Circulation	5,104
Equipment Rent/Lease/Maintenance	2,273
Supplies (Office, Prod., Computer)	3,287
Postage	804
Publicity & Promotion	0
Rent & Bldg. Maintenance	10,151
Telephone	1,634
Utilities	1,347
Miscellaneous Operating Expenses	2,361
Total Expenses	**132,184**
Profit/Loss*	**-8,327**

* **CQ** absorbed all the costs of moving and remodeling our offices. Most of the expenses appear in this quarter, but these will be covered next quarter by the sale of the **CQ** library.

Point Foundation
March 31, 1984

Assets	
Cash in Bank	62,654
Accounts Receivable	
Distributor — CQ	37,356
Distributor — SR	12,754
Mailing List — CQ	6,432
Other Products	9,288
Liabilities	
Subscriber Liability	
CQ	232,339
SR	91,516
Random House (**NWEC**)	N/A
Doubleday Advance	589,826

Point Project Reports:

Whole Earth Software Catalog & Review		
Income		
Software Review Subscriptions	44,381	
National Newsstand (Advance)	30,982	
Advance from Doubleday	22,326	
Interest Earned	2,146	
Total Income	99,835	
Expense	255,821	
Profit/Loss	-155,986	
Uncommon Courtesy		
Income		4,375
Expense		1,053
Profit/Loss		3,322
Chronicle Column		
Income		6,500
Expense		1,820
Profit/Loss		4,680
Other Products		
Income		15,384
Expense		4,429
Profit/Loss		10,955

POINT FOUNDATION

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Paul Hawken, Huey Johnson, Alan Rothenberg, Stewart Brand
Irmine Steltzner, Secretary

Whole Earth Chronicle Column
Joe Kane, J. Baldwin

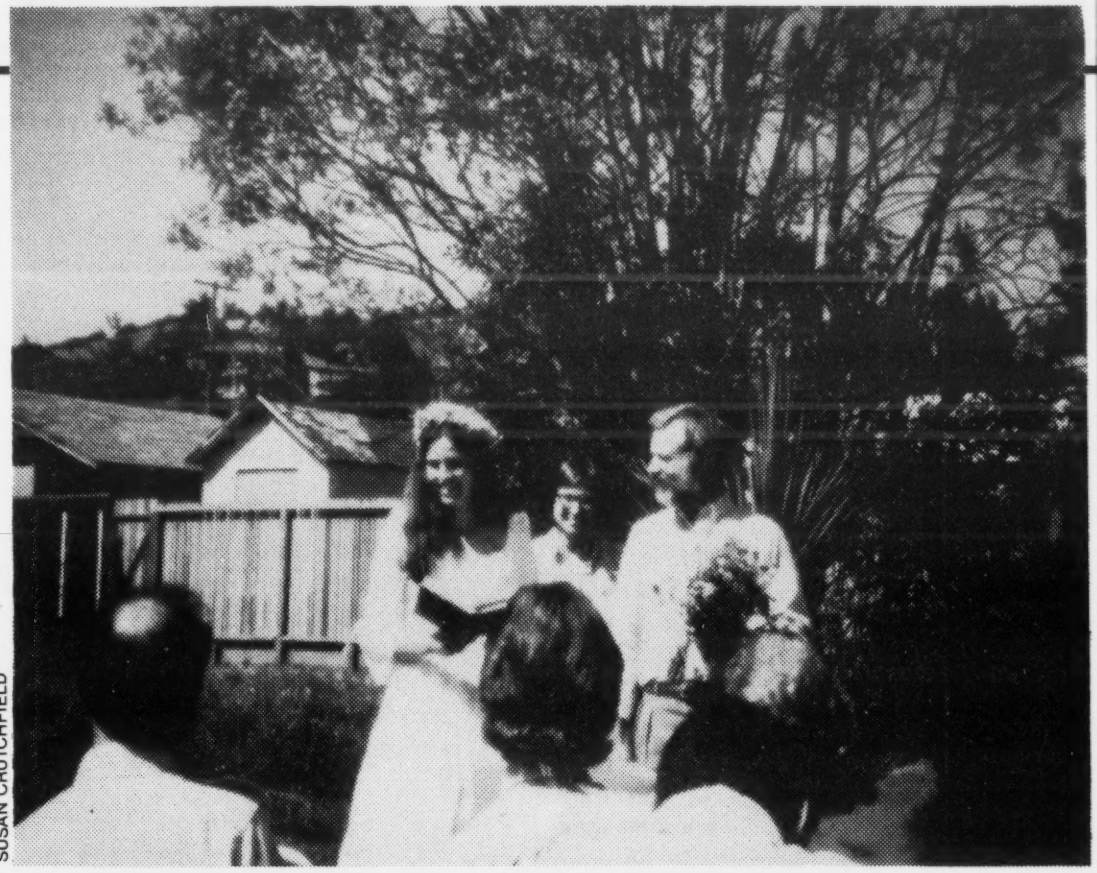
Whole Earth Software Catalog
Barbara Robertson, Art Kleiner, Matthew McClure, Kathy Parks, Jim Stockford, Cliff Figallo, Karen Hamilton, Cindy Craig

Gossip

*In a touching backyard ceremony in the flowery flats of Mill Valley, California, **CQ**'s Don Ryan and Susan Erkel were wed to each other last April 15. The book cover photos, maps, diagrams, and a good deal of the paste up you've been seeing in **CoEvolution** all these years have been Don's work. Susan's is the proofreading and a lot of the behind-the-scenes organization. Marriage becomes them, and they were pretty great already.*

*Such ceremonies are fine generation-binders, not only within blood families but within work families. At Susan and Don's reception were cherished old colleagues like Evelyn Eldridge-Diaz, Kara Adanalian, and Anne Herbert. Also newcomers from the **Whole Earth Software Review**. Also forthcoming old colleagues like Ben Campbell and Jonathan Evelegh.*

*After seven and a half years with **CQ**, and two years at the Whole Earth Truck Store before that, Ben Campbell is heading out to check out the rest of his life. As our most dedicated and capable volleyball player, he was put through a particularly spectacular pair of games and then given a gold watch, suitably inscribed.*



SUSAN CRUTCHFIELD

Susan Erkel (left) and Donald Ryan (right) being wed in their own backyard. Ceremony performed by Unitarian minister Ann Tydall.

CQ and NWEC Update

*Two readers who ordered the book **You're Gon'na Love It!** (Fall '83 **CQ**) never received the book; one of them sent a copy of his cancelled check. Author/publisher Chuck Lewis returned our call in late March, said he'd had problems, and would fill existing orders in a couple of weeks. Checking in mid-May: no books. If there's a moral here I suppose it's beware of hyperbole in book titles.*

*Three price changes on items reviewed in the Spring '84 **CQ**: the **Grassroots Fundraising Journal** (p. 29) is now $20/yr., the book on Eskimos, **Inua** (p. 108) is $16.50 in paperback and $36.50 in hardback, postpaid, and paperback editions are available for two books from Sterling Publishing: **The Complete Book of Sewing Short Cuts** is $12.95, and **Clown** is $8.95.*

*The book for children about resisting unwanted physical advances by others, **It's MY Body** (Winter '83 **CQ**) has a postpaid price of $3.75, unless you are ordering from Washington state, where it costs $3.98 (sales tax), and the publisher, Planned Parenthood of Snohomish County, has a new address: 2730 Hoyt Avenue, Everett, WA 98201. The book **Language Acquisition Made Practical** (Spring '84 **CQ**, p. 122) costs $12 postpaid (in California $12.78) and the publisher has a new address: Lingua House, 135 North Oakland, Box 114, Pasadena, CA 91101.*

***No Middle Ground**, the antiauthoritarian journal on Latin America and the Caribbean, is still $6 for four issues, but has a new address: 495 Ellis #781, San Francisco, CA 94102.*

*And finally four changes of address, all for items reviewed in the Spring '84 **CQ**: the book **The Washington Connection and Third World Fascism** is published by South End Press at 302 Columbus Avenue, Boston, MA 02116; the handbook **Air-Vapour Barriers** is available from the Canadian Home Builders' Association, 15 Toronto Street, 10th Floor, Toronto, Ontario, Canada M5C 2E3, attention: Mr. Henry ten Den; the North American Native Fishes Association's magazine **American Currents** is available from 123 West Mt. Airy Avenue, Philadelphia, PA 19119; and the catalog of sewing supplies, Imports by Clotilde, is available from 237 S.W. 28th Street, Fort Lauderdale, FL 33315. —Richard Nilsen*

"Or Whole Earth Access"

That phrase under access information in the **CoEvolution Quarterly** means you can mail order the item from the Whole Earth Access store, operated by Basic Living Products (**CQ** Summer '83 and **NWEC** p. 370). *Do not send orders for books reviewed in **CQ** or the **Whole Earth Catalog** to **CoEvolution Quarterly**.* Send your mail order book orders to:

Whole Earth Access
2990 Seventh Street
Berkeley, CA 94710

Postage & handling: Add $2 per order.

Rush orders U.P.S. (Continental U.S.): 40 cents additional charge per book.

Foreign orders (surface mail): 50 cents additional postage per book past the first two. International Registry Insurance (add $3.50 per order) is recommended. Payment only in U.S. funds drawn on a U.S. bank.

California delivery: Add 6% tax (BART counties 6½%).

VISA/MasterCard orders accepted.

Telephone (415) 845-3000.

Whole Earth Access has taken on mail order for **CQ** products. See page 144 for details.

Please note: Postpaid book prices listed with **CQ** reviews are for ordering from publishers only. Actual cover prices are often less and should be determined before ordering from Whole Earth Access.

His work with our library and with getting and editorially distributing the review books was in the very middle of our service the whole time we were building it.

Also hitting the road, Jack, is long-time Production Liaison Jonathan Evelegh — tall, red-headed, British, and flaming, burning the sedate end of his candle by day at **CQ**, *the smoky end by night DJ-ing at raucous San Francisco clubs. A while back Jonathan got one of those mountain bikes we've been adulating (a Univega Alpina Sport, Fall '82* **CQ**); *last week it got him. On a bike course in Golden Gate Park he engaged in high-speed frame wrestling and lost — multiple contusions, a big improvement over what his motorcycle did a couple years ago. In other injuries, Jim Stockford, of* **Whole Earth Software** *Etc., suffered the semi-annual ankle injury on the volleyball court — a severe strain, with ligaments pendant, now surrounded by a cast and sympathy.*

It's sometimes the opposite of musical chairs around here: the number of chairs stays the same, but when the music stops there's one less player. Ben's library and book-getting has been inherited by David Burnor, on top of his other tasks. Jonathan's printer dealings are being picked up by David Cohn, Becky Wilson, and Lisl Folsom. The $20,000 Whole Earth library, by the way, got bought by a reader of this column last issue — Mark Neuberger of Dallas, Texas.

Art Kleiner, meanwhile, has shifted from half-time editor of **CQ** *to full-time editor of* **Whole Earth Software Review**, *replacing Richard Dalton. After an intense year of magazine-founding, Dalton found bliss by a Swedish lake and is contemplating a novel about the computer business. His farewell issue, #2, of the* **Software Review** *is a masterpiece. It features* **CQ** *regular Mark O'Brien ("How I Became a Human Being," Spring '82* **CQ**) *on the cover, writing with his portable computer using a mouthstick. Dalton will continue doing the "Inside" column in the* **Software Review**. *Replacing Art Kleiner as part-time* **CQ** *editor is Kevin Kelly, a world-rambling correspondent with this magazine for years ("Information as a Communicable Disease" in this issue, p. 98). You'll see and hear more of Kelly next issue. This issue is Jay Kinney's second in a row — indeed, fourth out of the last five — and he has a rest coming. Jay will be back in the Winter issue.*

Thanks to David Cohn's efforts, our newspaper column (half-page every Wednesday in the San Francisco **Chronicle**) *is starting to be syndicated — in the Albuquerque* **Journal**, *the Sarasota* **Herald Tribune**, *and — oho — the Washington* **Times**. *"Oho" because the* **Times** *is owned by Reverend Moon of Moonie fame, whose religious techniques we do not especially admire. It's a conservative paper, reportedly objective and untrammeled by its owner. We'll see what they do with our column on staying clear of religious cults.*

I'm intrigued by this conversation on the subject from a computer teleconference on the EIES Network:

PHILIP ELMER-DEWITT: An editor from the Washington **Times** *crashed on my apartment floor the other night, guest of a friend of my wife's. He seemed a pretty nice sort, even if he favored T-shirts that said "Yes!" across the chest. I dunno about the woman he married, under orders from the Rev., a coupla years ago. Neither, it turns out, does he.*

Near as I could tell, he was mostly interested in putting out a good newspaper. That's tough work. Thankless, too. I tend to give guys like that the benefit of my doubt.

ART KLEINER: Phil, what an intriguing remark: ". . . neither, it turns out, does he." Has he met the lady?

PHILIP ELMER DEWITT: Near as I can tell, he met her the day they got married. Apparently they've run into each other a coupla times since, but nothing much has come of it. After a respectful 3 years, they are scheduled to make babies. Then it gets confusing. I don't know if they get to keep the kids, or if the Reverend collects the dividends.

Anyway, last I heard, this particular Moonie was cutting his losses and looking for romance outside the church.

—Stewart Brand

Thank you

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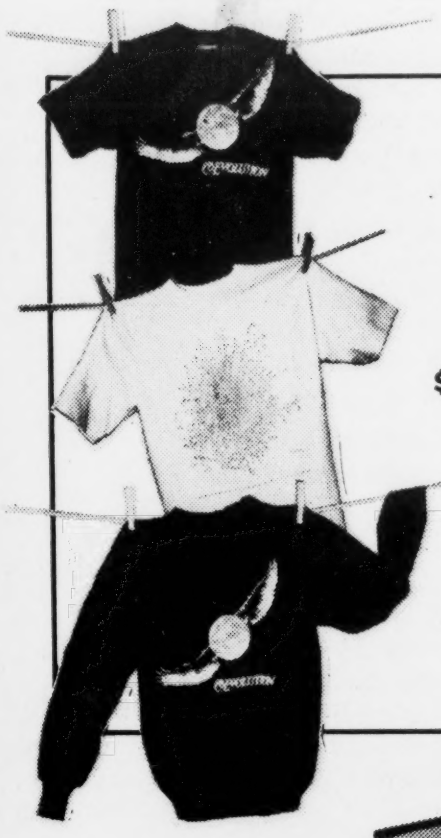
The Retaining Subscriber list includes only those who became retainers since the last issue, as of 5/4/84. Retaining and Sustaining Subscribers get your **CQ**s in an envelope, delivered first-class or airmail, for one year. Maniacal Subscribers get your **CQ**s in an envelope, first-class or airmail, for the rest of your life (or ours, whichever comes first). For all three, we gratefully publish your name and town in the magazine (unless you say not to). All contributions are tax-deductible because we're a nonprofit foundation.

OTHER PRODUCTS

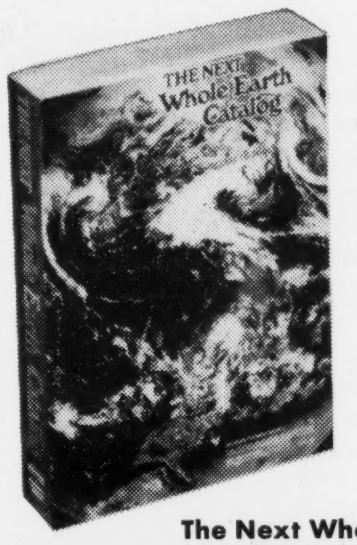
IN FEBRUARY of this year, we passed the fulfillment of the mail orders for "Other Products" to the Whole Earth Access Company in Berkeley. As you know, they also handle the mail order fulfillment of books reviewed in CQ and in the Next Whole Earth Catalog. The products pictured below should now be ordered from them; yes, even CQ T-shirts and sweatshirts. —Arnie Kotler



CoEvolution T-shirt
$8 XS (youth's 14-16), S (34-36), M (38-40), L (42-44), XL (46-48)

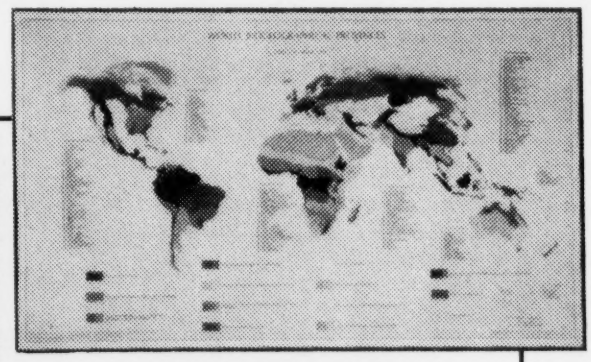
Bluegenes T-shirt
$10 S (34-36), M (38-40), L (42-44), XL (46-48)

CoEvolution Sweatshirt
$16 S (34-36), M (38-40), L (42-44), XL (46-48)



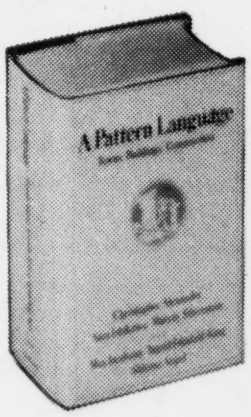
The Next Whole Earth Catalog
2d Edition (1981)
$16

CoEvolution Quarterly Back Issues
$3.50 Each
$10 for 4
Issues 14-26, 28-41

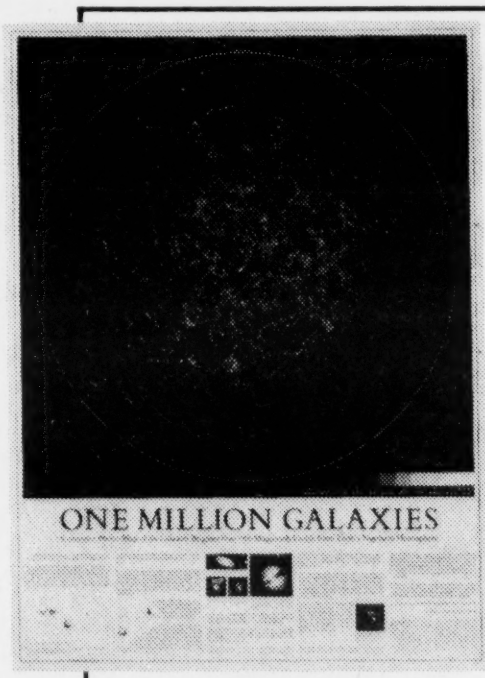


World Biogeographical Provinces Map
$4
22" x 39" (mailed in tube)

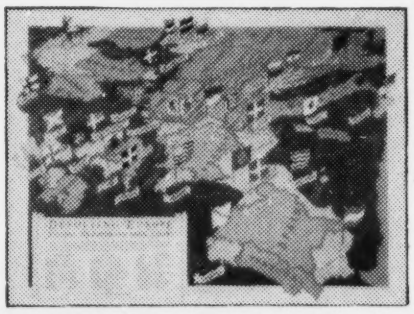
Paul Hawken's
The Next Economy
$14.50



A Pattern Language
(Towns, Buildings, Construction)
$45

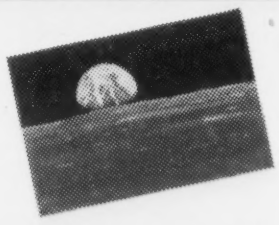


One Million Galaxies Map
$5 continental U.S.
(elsewhere $7.50)
39" x 47" (mailed in tube)



Devolving Europe Map
$3
11" x 15" full-color
(mailed in tube)

Whole Earth Post Cards
$3.50 package of ten



Earthrise Postcard
$3.50 package of ten

When ordering specify quantity and size (where applicable).
Please include $2 per order for postage and handling.
California residents include 6% tax on all orders.
Send all orders to:

WHOLE EARTH ACCESS COMPANY
2990 Seventh Street
Berkeley, CA 94710

How you can help CQ get better newsstand distribution . . .

Many CoEvolution readers have remarked — complained, usually — that it's hard to find **CQ** at large in the world. We're embarking on efforts to expand the magazine's retail distribution, but we need your help.

It turns out that newsstand distribution has become sophisticated enough a business that you can fine-tune it if you know "who the readers are." Most magazines know because they're always sampling for advertisers. We don't know because we don't have advertisers.

The offhand survey we did two years ago was both encouraging and insightful for **CQ** editors. We'd like that benefit again, but the main beneficiary this time is the would-be reader cruising for **CoEvolution**.

—Stewart Brand

Who are **YOU?** (Circle appropriate answers) Age: under 20 20-30 31-40 41-50 50+ Sex: M F

Occupation: _____

Household income: under $10,000 $10-20,000 $20-30,000 $30-40,000 $40,000+

Schooling: High School College Other: _____

Where do you live? City Suburbs Small town Country

Where/how did you first hear of **CQ**? _____

How long have you been reading **CQ**? _____ How many people read your copy of **CQ**? _____

What other magazines do you read?

☐ Country Journal	☐ In These Times	☐ New Age Journal	☐ Outside	☐ Science 84
☐ East-West Journal	☐ Mother Earth News	☐ New Shelter	☐ Parabola	☐ Time
☐ Economist	☐ Mother Jones	☐ Newsweek	☐ Popular Science	☐ Vegetarian Times
☐ Fine Homebuilding	☐ Nation	☐ Organic Gardening	☐ Rolling Stone	☐ Village Voice

Others: _____

Where do you usually buy magazines? Bookstore Grocery store Convenience store Newsstand

Other: _____

Likes and Dislikes

What stories and authors in **CQ** have you most enjoyed reading?

_____

What stories or authors do you generally skip over?

_____

What isn't in **CQ** and ought to be?

_____

If you were allocating space in the magazine, what changes would you make?

	More	Less	OK as is
Politics			
Community			
Land Use			
Soft Tech			
Whole Systems			
Nomadics			
Learning			
Communications			
Craft			
Gossip			
Movies			
Fiction			
Poetry			
Comics			

Comments

Where to Send This Survey

IF YOU ARE SUBSCRIBING, use the order form on the reverse side and send survey along with order to **CQ**, P.O. Box 27956, San Diego, CA 92128 USA. **ALL OTHERS:** Send survey to **CQ**, 27 Gate Five Road, Sausalito, CA 94965 USA.

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CoEvolution Quarterly

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3421

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☐ Maniacal: $1,000/life. You get your **CQ** in an envelope, airmail, for the rest of your life (or ours, whichever comes first).

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Old address (put your label here)

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Address _____
_____ Zip _____

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Address _____
_____ Zip _____

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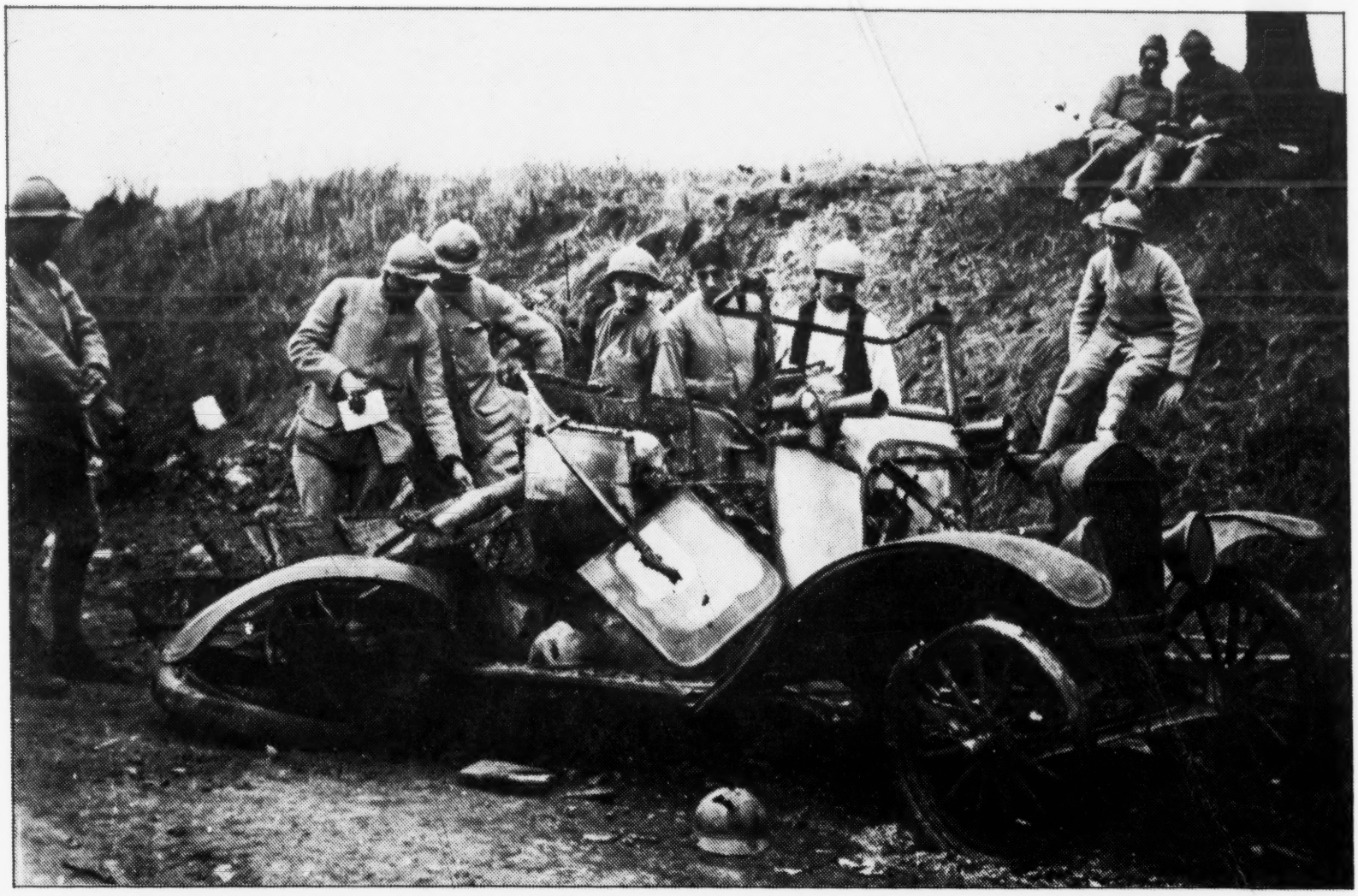

WHAT *IS* THIS? BIG CONTEST!!

CHOOSE ONE:

A. J. Baldwin's shakedown cruise in his kelp-driven Minicar comes to an abrupt end. As shaken **CQ** research volunteers survey the wreckage, Baldwin explains that ''subcutaneous seaweed fermentation'' was responsible for the project's demise.

B. Members of the dreaded ''Aquarian Conspiracy'' (note uniforms) investigate the last remaining artifact from old Cartesian universe prior to massive Paradigm Shift.

C. CIA-backed Salvadoran troops smugly observe covertly damaged Cuban missile launcher discovered in used car lot in North Miami.

D. None of the above.

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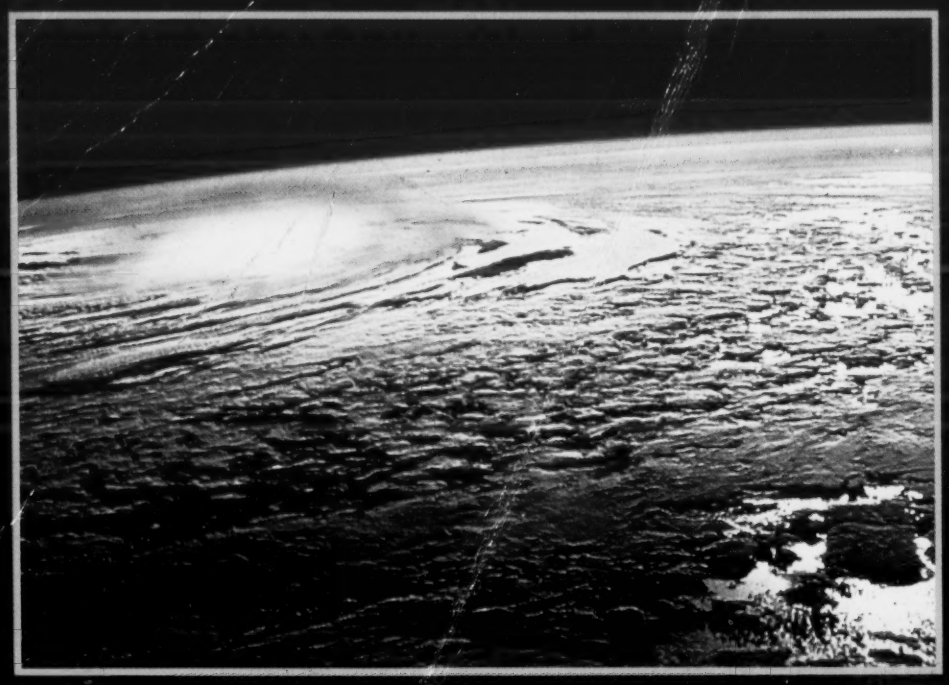

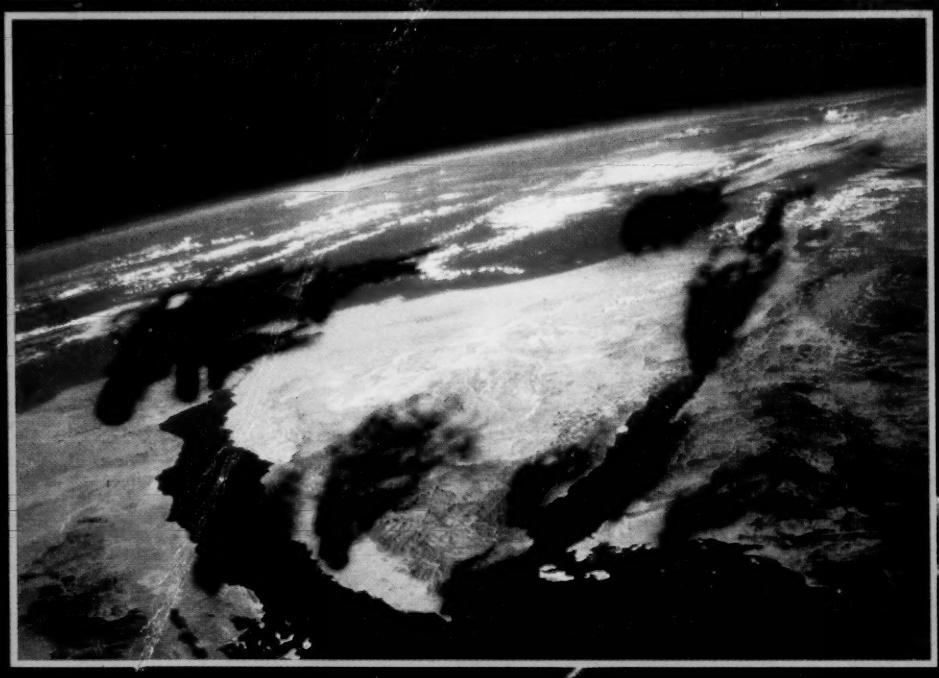

Nuclear Winter

The Inside Story

by Paul Ehrlich

CQ looks at the behind-the-scenes collaboration between scientists which resulted in the influential World After Nuclear War conference in Washington, D.C., late last year. *Page 88.*

(Top) Nuclear explosions over cities ignite huge fires. The largest fireballs reach into the stratosphere, burning nitrogen and destroying the Earth's protective ozone layer.

(Middle) Smoke plumes from burning cities, forests and oil facilities spread through the atmosphere.

(Right) Smoke and dust combine in enormous clouds, blocking sunlight, reducing temperatures, covering the Northern Hemisphere and spreading across the equator.

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